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**ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES**

### **Abstract:**

The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH  
ANTIGENIC PEPTIDES

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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10 (ii) Monoclonal Antibodies

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MOABS - COMBINATORIAL:

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LPHIC:

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[3]

## BACKGROUND

[4]       G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.  
15   When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door  
20   lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own  
25   activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5]       GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics  
30   based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6]       General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7]       The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., *Curr. Opin. Cell Biol.* 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern. Watson, S. and S. Arkinstall, *The G protein Linked Receptor Facts Book*, Academic Press, San Diego, CA (1994); Bolander, F. F. *Molecular Endocrinology*, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which  
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"  
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

#### SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention  
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such  
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under  
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and  
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a  
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

10 [21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide  
15 sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids.  
20 Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino  
25 acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

30 [23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

#### BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

#### DETAILED DESCRIPTION

##### 15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to 20 certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of 30 the GPCRs from which they have been derived to provide unusually specific and



immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced  
5 therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can  
10 selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

[30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the  
20 antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification  
25 number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177,  
30 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

## B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may  
5 result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

10 [39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the  
15 polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is  
20 retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

25 [40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group,  $-NH_2$ , and one carboxyl group,  $-COOH$ . The alpha-amino acids,  $RCH(NH_2)COOH$ , are the building blocks from which proteins are typically constructed.  
30 Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "**nonconservative**" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact  
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples  
10 of antibody fragments include Fab, Fab', F(ab')<sub>2</sub>, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. *See* US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least  
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived  
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,  
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating  
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] "Biologically active" or "biologically functional," when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] "Annotation" refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] "BLAST" refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] "BLASTP" refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] "BLASTX" refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] "Buffer" refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] "CDS" refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] "Clone" in molecular biology refers to a vector carrying an insert DNA sequence.

[59] "Cloning" in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is



inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "**Cluster**" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "**Comparison window**" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600, usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "**Complementary**" or "**complementarity**" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "**Complex**," or "**aggregate**," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "**Composition**" indicates a combination of multiple substances into a mixture.

[65] "**Composition comprising a given amino acid sequence**" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "**Consensus sequence**" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

- [67] "Conservative changes" to an amino acid sequence, see Analog.
- [68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.
- [69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.
- [70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) on the same polypeptide chain ( $V_H$ - $V_L$ ).  
10 By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).
- [71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.
- 20 [72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.
- [73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.
- [74] "FASTA" refers to a modular set of sequence comparison programs used to  
25 compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.
- 30 [75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at  $1e-6$  for finding genes; and at  $1e-15$  for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

25 [85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (*e.g.*, in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

**[88]** "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

**[89]** "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

**[90]** "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

**[91]** "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

**[92]** "Isolated" generally means that the material is removed from its original environment (*e.g.*, the natural environment if it is naturally occurring).

**[93]** "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

[94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous  
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.

10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.

15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate  
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,  
25 probes, medicaments, and therapeutics.

[97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.

30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] **"Oligonucleotide"** refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] **"Operably linked"** or **"operably connected"** indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] **"Orphan receptor"** refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] **"PCR"** or **"polymerase chain reaction"** refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] **"Plasmids"** refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.



[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] **"Portion"** or **"fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxemic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or  $\text{Ca}^{2+}$ . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and  $\text{Ca}^{2+}$ /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about  $T_m - 5^\circ\text{C}$  ( $5^\circ\text{C}$  below the melting temperature ( $T_m$ ) of the probe) to about  $T_m - 20 - 25^\circ\text{C}$  for a cRNA probe and to about  $T_m - 15^\circ\text{C}$  for an oligonucleotide probe. **"Highly stringent conditions"** refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but  
5 will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about  $55 - 65^\circ\text{C}$  in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200  $\mu\text{g/ml}$  sheared and denatured salmon sperm  
10 DNA would be  $30 - 35^\circ\text{C}$ . **"Very highly stringent conditions"** indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of  
15 skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and  
20 the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] **"Substantially purified"** refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they  
25 are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

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#### C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such  
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative  
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably  
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (*i.e.*, peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the  
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all  
5 antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic  
10 selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

15 [125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences,  
20 which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type  
25 analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

#### D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

##### [127] ANTIGENIC PEPTIDES GENERALLY:

30 [128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (*e.g.*, fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

**[130] EXPRESSION PROFILES BASED ON PROTEINS:**

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

**[132] SCREENING FOR ACTIVITY:**

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing  
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] **PROTEIN PURIFICATION:**

[136] The antigenic peptides and proteins or polypeptides containing them can be purified  
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to  
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

25

E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND  
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION

1. SYSTEMS AND METHODS FOR SCREENING FOR A  
PARTICULAR GPCR OR ANTIGENIC PEPTIDE

30 [137] **SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and



methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5   **[139]   SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

**[140]**   Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10   **[141]   LIST OF ASSAYS:**

**[142]**   A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative  
15   examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and  
20   low-light detection assays. *See* U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

**[143]           ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):**

**[144]**   One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA  
25   comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,  
30   and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

**[145]           IMMUNOFLUORESCENCE ASSAY:**

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a  
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA  
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,  
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction  
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between  
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

**[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:**

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, 5 the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

**[156] IMMUNOSTICK (DIP-STICK) ASSAYS:**

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are 10 the same and the format can either be simultaneous or sequential.

**[158] IMMUNOCHROMATOGRAPHIC ASSAYS:**

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one 15 end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

**20 [160] IMMUNOFILTRATION ASSAYS:**

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or 25 the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

**[162] BIOSENSOR ASSAYS:**

30 [163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential ( $\mu$ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection  
5 limit of the assay is 1,000 molecules of urease per minute.

## 2. ANTIBODIES

### **[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:**

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR  
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,  
20 for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole, preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

**[166]** The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for  
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

### **[167] ANTIBODIES GENERALLY:**

**[168]** In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from  
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)*, 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V<sub>L</sub>) and variable heavy chain (V<sub>H</sub>) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, *e.g.*, keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride,  $\text{SOCl}_2$ , or  $\text{R}^1\text{N}=\text{C}=\text{NR}$ , where R and  $\text{R}^1$  are different alkyl groups.

**[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):**

**[176]** Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

**[177]** Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

**[178]** Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1  $\mu\text{g}$  of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

## (ii) Monoclonal Antibodies

**[179] ANTIBODY PREP - MONOCLONAL:**

- [180]** Monoclonal antibodies are obtained from a population of substantially  
5 homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.
- 10 **[181]** In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to  
15 form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).
- [182]** The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the  
20 enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.
- [183]** Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a  
25 medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal  
30 antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or  
5 enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant ( $K_a$ ) of at least about  $10^7$  liters/mole, typically a high affinity or avidity at least about  $10^9$  liters/mole,  
10 preferably at least about  $10^{10}$  liters/mole, and further preferably at least about  $10^{11}$  liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may  
15 be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSE<sup>TM</sup>, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (*e.g.*, by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli*  
20 cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

30 [188] **MOABS - COMBINATORIAL:**

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,



Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al., Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-5732 (1989), and Alting-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the  $\lambda$ IMMUNOZAP(H) and  $\lambda$ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

**[190] HUMANIZED MOAB:**

**[191]** Binding partners can also be constructed utilizing recombinant DNA techniques to incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. *See* Verhoeven et al., *supra*; *see also* Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10  $V_{H\alpha}$ ,  $V_{H\beta}$ ,  $V_{H\gamma}$ ,  $V_{H\delta}$ ,  $C_{H1}$ ,  $V_L$ , and  $C_L$  regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAP<sup>TM</sup>(H) or IMMUNOZAP<sup>TM</sup>(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15  $V_H$  and  $V_L$  domains may be produced, *see* Bird et al., *Science* 242:423-426 (1988).

**[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):**

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

**[195] CHIMERICS:**

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

**[197] ANTIBODY LABELING (ALL ABS):**

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as  $^3\text{H}$ ,  $^{14}\text{C}$ ,  $^{32}\text{P}$ ,  $^{35}\text{S}$ , or  $^{125}\text{I}$ ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, J. *Histochem. Cytochem.*, 30:407 (1982).

10 (iii) Humanized And Human Antibodies

**[199] HUMANIZED AB GENERALLY:**

**[200]** Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeyen et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

**[201]** The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J<sub>H</sub>) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA. 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

#### (iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form F(ab')<sub>2</sub> fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')<sub>2</sub> fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

#### (v) Bispecific Antibodies

##### 10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, *e.g.*, F(ab')<sub>2</sub> bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional  
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the  
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired  
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C<sub>H</sub> 2, and C<sub>H</sub> 3 regions. It is preferred to have the first heavy-chain constant region (C<sub>H</sub> 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin  
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular  
5 significance.

**[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:**

**[211]** In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the  
10 other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210  
15 (1986).

**[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":**

**[213]** Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to  
20 unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

**25 [214] ANTIBODIES - DIABODIES:**

**[215]** The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain ( $V_H$ ) connected to a light-chain variable domain ( $V_L$ ) by a linker that is too short to allow pairing between the two domains  
30 on the same chain. Accordingly, the  $V_H$  and  $V_L$  domains of one fragment are forced to pair with the complementary  $V_L$  and  $V_H$  domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. *See* Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V<sub>H</sub> and V<sub>L</sub> domains of a first antibody joined by a 25-amino-acid-residue linker to the V<sub>H</sub> and V<sub>L</sub> domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using  
10 chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')<sub>2</sub> fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is  
15 then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992)  
20 describe the production of a fully humanized BsAb F(ab')<sub>2</sub> molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. *See also* Rodriguez et al., Int. J. Cancers  
25 (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')<sub>2</sub> heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are  
30 linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

**[221] ANTIBODY PURIFICATION GENERALLY:**

**[222]** When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., Bio/Technology 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

**[223] BEFORE LPHIC:**

**[224]** The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human  $\gamma 1$ ,  $\gamma 2$ , or  $\gamma 4$  heavy chains, Lindmark et al., J. Immunol. Meth. 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human  $\gamma 3$ , Guss et al., E.M.B.O. J., 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a  $C_H 3$  domain, the Bakerbond ABX<sup>TM</sup> resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSE<sup>TM</sup>, chromatography on an anion or cation



exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

**[225] LPHIC:**

**[226]** Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. *See* US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (*e.g.*, less than about 0.25 M salt).

**[227]** The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (*e.g.*, cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (*e.g.*, alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (*e.g.*, a Phenyl SEPHAROSE™ column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW™ column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL™ EMD Propyl or FRACTOGEL™ EMD Phenyl columns (E. Merck, Germany); MACRO-PREP™ Methyl or MACRO-PREP™ t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C<sub>3</sub>)™ column (J. T. Baker, New Jersey); and TOYOPEARL™ ether, phenyl, or butyl columns (TosoHaas, PA).

**[228]** The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (*e.g.*, less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

[233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

**[237] DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR.

Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-  
10 p185<sup>HER2</sup> antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

#### (ii) Assays

##### 15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as <sup>3</sup>H,  
20 <sup>14</sup>C, <sup>32</sup>P, <sup>35</sup>S, or <sup>125</sup>I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,  
25 *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.* 40:219 (1981); and, Nygren, *J. Histochem. and Cytochem.* 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, *Monoclonal Antibodies: A Manual of Techniques*, pp.  
30 147-158 (CRC Press, Inc. (1987).

##### [244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.*, U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

#### (iii) Affinity Purification

##### [247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

#### (iv) Therapeutics

##### [249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious diseases or targeting immune complexes to cell surface receptors.

**[251] THERAPEUTIC FORMULATIONS:**

**[252]** Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol, A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

**[253]** The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

**[254] THERAPEUTIC FORMULATIONS -STERILE:**

**[255]** An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

**[256] THERAPEUTIC ADMINISTRATIONS:**

**[257]** The route of antibody administration is in accord with known methods, *e.g.*,  
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

**[258]** The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the  
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., *J. Biomed. Mater. Res.*, 15:167-277 (1981), and Langer, *Chem. Tech.*, 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., *Biopolymers*,  
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT™ (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

**[259] THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-  
20 POLYMERS:**

**[260]** While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of  
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S--S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,  
30 and developing specific polymer matrix compositions.

**[261] THERAPEUTIC ADMINISTRATIONS – SUSTAINED RELEASE-  
LIPOSOMES:**

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors  
15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR  
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-  
25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung  
30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne



muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

#### EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

#### EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

#### EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5                   EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO<sub>3</sub>, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.  
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15                   EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:  
                  AFFINITY PURIFICATION OF ANTISERUM

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of  
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis with the corresponding antigen to confirm the presence and identity of recovered antibody  
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN<sub>3</sub>.

                  EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include  
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN<sub>3</sub> (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

[281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

#### EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

[282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO® TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO® Target Retrieval Solution, 10x Concentrate (S1699), deionized H<sub>2</sub>O, 20L container, with lid, marked at the 10L level, DAKO® TBS (Tris Buffered Saline-S1968), and DAKO Tween® (S1966).

[283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO® TBST into a 20 L container, b) add deionized H<sub>2</sub>O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO® TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H<sub>2</sub>O and pour into slide bath, b) measure 15 ml of DAKO® Target Retrieval solution, c) add to H<sub>2</sub>O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H<sub>2</sub>O, b) add 2 envelopes of DAKO® TBS, c) add 5 ml of DAKO TWEEN®, and d) replace lid and agitate 10 to 20 times.

#### EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

[284] Solutions for antibody detection are prepared using Vector® Biotinylated antibody (BA series), Vectastain® ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector® Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

#### EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

[285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

Xylene 5 Minutes  
Xylene 5 Minutes  
Xylene 5 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 2 Minutes  
100% Alcohol 1 Minute  
95% Alcohol 2 Minutes  
95% Alcohol 2 Minutes  
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

#### EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H<sub>2</sub>O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H<sub>2</sub>O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H<sub>2</sub>O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H<sub>2</sub>O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

#### EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

#### EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% Tween<sup>TM</sup> 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –
- 15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.
- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then
- 20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.
- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody
- 25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is
- 30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein  
10 and is not limited except as by the appended claims.

## WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid  
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-  
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
  - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
  - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,  
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,  
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any



one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is  
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a  
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the  
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a  
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced  
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide 15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,  
 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,  
 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide  
 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563,  
 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009,  
 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

- b) at least one of a reagent or a device for detecting the antibody.
16. An assay for the detection of a particular GPCR in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 1-5,
- b) contacting the isolated antigenic peptide with the sample under conditions suitable  
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific  
for the particular GPCR present in the sample, to provide an antibody-bound antigenic  
peptide, and
- c) detecting the antibody-bound antigenic peptide, and therefrom determining whether  
the sample contains the particular GPCR.
17. The assay of claim 16 further comprising the step of binding the isolated  
10 antigenic peptide or the antibody to a solid substrate.
18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.
19. The assay of any one of claims 15-18 further comprising, prior to the  
contacting, obtaining the sample from a human being.
20. The assay of any one of claims 15-19 wherein the assay is selected from the  
15 group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a  
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay  
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an  
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a  
biosensor assay, and a low-light detection assay.
21. An isolated nucleic acid molecule encoding an antigenic peptide according to  
any one of SEQ ID NOS. 692-2292.
22. The isolated nucleic acid molecule according to claim 21 wherein the  
25 molecule encodes a naturally occurring human antigenic peptide.
23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least  
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.
24. The isolated nucleic acid molecule according to claim 23 wherein the  
antigenic peptide is at least about 95% identical to the antigenic peptide.
25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the  
30 molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

a) searching the candidate polypeptide sequence using a comparison window of the length, and

10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising  
15 no charged amino acids.

28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

31. The method of any one of claims 27-30 wherein the method further comprises:

c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino  
25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

10 38. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

15 41. The method of any one of claims 27-40 wherein the polypeptide is a human protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

25 46. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

30 47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim 43.

48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

- a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and
- b) at least one of a reagent or a device for detecting the antibodies.
49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.
50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.
51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.
52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.
53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.
54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.
55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:
- a) an isolated antibody according to any one of claims 49-53, and
- b) at least one of a reagent or a device for detecting the antibody.
56. An assay for the detection of a candidate polypeptide in a sample, comprising:
- a) providing an isolated antigenic peptide according to any one of claims 43-47,
- b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and
- c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the  
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an  
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the  
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic  
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.



SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	<p>MVSSGGRMRS L WFIIVISFL PNTGEFSRAA LPFGLVREL SCEGYSIDLR CPGSDVMIE SANYGRTDDK ICDADPFQME NTDCYLPDAF KIMTQRCNNR TQCIVVTGSD VFPDPCPGTY KYLEVQYECV PYFVCPGTL KAIVDSPCIY EAEQKAGAWC KDPLQAADKI YFMPWTPYRT DTLIEYASLE DFQNSRQITTT YKLPNRVDGT GFVVYDGA VF FNKERTRNIV KFDLRTRKS GEALINYANY HDTSPYRWGG KTDIDLAVDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWETVYDKRA ASNAFMICGV LYVVRVYQD NESETGKNSI DYTYNTRLNR GEYVDVPPFN QYQYIAAVDY NPRDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTTSS AELFKTIIST TSTTSQKGPM STTVAGSQEG SKGTKPPAV STTKIPPIN IFPLPERFCE ALDSKGKWP QTORGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLN CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFAGDVS SSVRLMEQLV DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ AHTATMLLDT LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD FKPLGIKGA GSSIQLSANT VKQNSRNGLA KLVIYRSL GQFLSTENAT IKLGADFIGR NSTIAVNSHV ISVSINKESS RYVLTDPVLF TLPHDIPDNY FNANCSFWNY SERTMMGYWS TQCKLVDIN KTRITCACSH LTNFALMAH REIAYKDGVBH ELLLTVITWV GIVISLVCLA ICIFTFCFFR GLQSDRNTIH KNLCINLFIA EFIFLIGIDK TKYAIACPIF AGLLHFFELA AFAWMCLEGV QLYMLVEVF ESEYSRKKYY YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVNDYFIWS FIGPVTFIL LNIFLVITL CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI VMAYLFTIFN AFQGVFIF HCALQKKVRK EYKCFRHSY CCGGLPTESP HSSVKASTTR TSARYSSGTQ SRIRRMWNDT VRKQSESSFI SGDINSTSL NQGHSLNNAR DTSAMDITPL NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND TAFEKMISE L VHNNLRGSS KTHNLELTL VPVIGGSS EDDAIVADAS SLMHSDNPGL ELHKELEAP LIPQRTSHLL YQPQKKVKSE GTDSYVSQLT AEAEHLQSP NRDSL YTSMP NLRDSPYSPES SPDMEEDLSP SRRSENEIDI YKSMPNLGAG HQLQMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL</p> <p>cgcggcttgc gagacagcga gccagagctt ggggtttgtt gcgagagcca cggcgggggc tggggcgagt gggcgcatg gctgaagctt gcgtcttcca acctgaaga gccgttgcct tgaagagcca gggacagga gaccggigcg atggcagcgc gggcccccg ccgttgcgccc gggccggccc ggccttgcctt agccgcgcga gagcggggc tgccttgcg cgtccatgga gcagcgggaa gggcgaaact ccggagcgc gcccttgc cgccttgcgg cggacttgc aaggggcca gcccgcgg accgcgaggg aagagagcccc cgtccagccc cgcagggccc cggccgggg gcagcgggg acatcgaggg gcagcggagg gagcagcgc gcgggagagg ccggcgggg agggggccc agcaatgcc gggccgctag ggcgtctctg ctctcggc ctggggtctg tgggtcggc cggcccgagc ggcggggc cgcctctg cgcgggcgc tgcagctcgc acggcgacc tgggttggac tgcctcgagg aggggttgc ggcgggcgc gggggcga cgccttcc ccaagcgcgc gataatcaga tgaacaacat tactcagttg cagagagatg cattaaaga ctctcttt ctgaagagc tacaatggc gggcaacgac ctctttta tccacccaaa ggccttctt ggggtgaag aactcaagt tcaacgctc cagaataatc agttgaaac agtacccagt gaagccauc gaggggctgag tgccttgcag tcttgcgt tagatgcca ccaatacc tcatgcccg aggcagattt tgaaggactt</p>	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490		A	Homo sapiens

[illegible]

528	160411	G Protein- Coupled Receptor GPR48	NP_060960.1	P	Homo sapiens
<p>atgttattaa taataataga agaaagaaga ataaagctta gtccgtgtgc ttaaaaaa aaaaattta ctgtattccc atctatgggc tttagacct tttctgggtg ggttgtataa gttalaatg ttcaatagt ttttgaaaca gttgtgctaaa tcaatagca accactggc ataattagta ttctgaat actaaaaa tccagctaga ttgcagtta ataatraac tgracatac gtgcataata tgaatttta tcttatgaa attatttta gaacacaagt tgggaatgt ggtcttgtt catttgtt aathaagct acctoctaaa ctatagggc tgccagtagc agacigttaa atgttgtt atatacttt tgcattgtaa atagtcttg ttgacattg tcaagttaa azaaacagaa tctttgata tcaaatcat gtagttgta taaatgtgg gaaggattta ttacagtgt gttgtaatt tgaaggcca actatttaca agtttataa atgtctatca tglatttta cacatcgt ataatlataa tcaatctg gtaagaact cctaattaaa aggttttc caaatctag gttattgaaa attttcatt ttattcatt aaaaactaga ataacagata lataaagtg ttaattcttg tgcataatg tatgaatac aatattgac tcaagtgt gaattataa agttictaga agcaaaaa a</p> <p>MPGPLGLLCT LALGILGSAG PSGAAPLCA APCSCDGRD VDCSGKGLTA VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFIHPKA LSGLKELKVL TLQNNQLKT V PSEAIRGLSA LQSLRLDANH ITSPEDSFE GLVQLRHL WL DDNSLTEPV HPLSNLPTLQ ALTLALNKIS SIPDFAFTNL SSLVVLHLHN NKIRGLSQHC FDGLDNLETL DLSYNNLGEF PQAIAKARPSL KELGFHSNSI SVIPDGAFDG NPLLRTHLY DNPLSFVGN ASHNLSDLHS LVIRGASMVQ QFPNLTGT VH LESLTLTGTK ISSPNNLC EQKMLRTL DL SYNNIRDLPS FNGCHALEEI SIQRNQIQI KEGTFQGLIS LRILDSRNL IEHISRAFA TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNLR SLSPYAYQC CAFWGCDSYA NLNTEDNSLQ DHSVAQEKGT ADAANVTSL ENEHSQIII HCTPSTGAFK PCEYLLGSWM IRLTVWFIF VALFFNLLVI LTFASCTSL PSSKLFGLI SVSNLFMGIY TGILTFDAV SWGRFAEFGI WWETGSGCKV AGFLAVESSE SAJLLMLAT VERSLSAKDI MKNGKSNHLK QFRVAALSAF LGATVAGCFP LFRGEYSAS PLCLPFTTGE TPSLGTFTVL VLLNSLAFLL MAVYTKLYC NLEKEDLSEN SQSSMIKHVA WLIFTNClFF CPVAFFSFAP LITAISPE IMKSVTLIFF PLPACLNPLV YVFFNPKFKE DWKLLKRRVT KKS GSVSVSI SSQGGCLEQD FYDCCGMYSH LQGNLTVDCD CESFLLTKPV SKHLIKSHS CPALAVASCQ RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC FYQSRGFPLV RYAYNLPRVK D</p>					
529	160435	LS160435 Receptor	AX147830	A	Homo sapiens
<p>aacttgaagg gcagccgtct gccgccacg aacactctt caagcacttt ggtgtgaccac ggttgtcaag ctgtgtgtgtgt gcccccgag tccccggctc tgaggcacgg ccgtcgactt aagcgtgtga tctgtttacc tggagacct ctgagctctc acctgtact tctgtccgtgt cttctgcaca gaggccgggc gaggacacct ctaggtatga ggttcccgac agcacccggcc cggacaacgc gacgtgtgca atgtctgtgga accggggat cgtgtgtgtgt cgtgtgtgtgt tgtactgtct ggtgtgtgtgt gtcagcatcc cgggcaacct cttctctgt tgggtgtgtgt gtcgtgtgtgt ggtgtgtgtgt tccccgtgtgt tcatctcat gatcaacctg agcgtgtgtgt accgtgtgtgt gtcgtgtgtgt tgcgtgtgtgt aaatttaca ctaattgcaac cgtccacct gggtgtgtgt ggtgtgtgtgt tgcacgtgtgt gtcgtgtgtgt cttttatga aacatgatt ccagcatctt caccatgacc tgtatcagcg tggagcgttt cgtgtgtgtgt cgtgtgtgtgt tcaagtcaca gtcgtgtgtgt cgtgtgtgtgt acgtgtgtgt cgtgtgtgtgt gggagacctgt gtcgtgtgtgt tccccgtgtgt cgtgtgtgtgt cgtgtgtgtgt tctatctac ccgtgtgtgt ccctgtgtgtgt caccacctgt ttcagctgtgt gatgtgtgtgt ggtgtgtgtgt tgtgtgtgtgt gttctcttc accatcttca tctgtgtgt cttatctgt ttcagctgt cgtgtgtgtgt ttaacgtgtgt accatcttca agctgtgtgt caggtgtgtgt gtcgtgtgtgt ggtgtgtgtgt ggtgtgtgtgt ggtgtgtgtgt ggtgtgtgtgt ggtgtgtgtgt</p>					

Accession	Gene	Protein	Species	Sequence
530	LS160435 Receptor	160435	LR80	<p>gcttgcggcc caacaacttc gttctcttgg cgcacalagt gtagccggcgtg ttacaggcca agagcttacta ccaagtgtag  aagctcacgc tgggtctcag ctgcctcaac aactgtctgg acccggtttg ttactattt gtagtccgggg aattccagct ggccttgccgg  gaatatttgg gcttgccggcc ggtgtccacaga gacaccttgg acacggcccg cgaagagctc ttctcgcca ggaacacagtc  cgttgctctcc gaggccgggtg cgcaccttga aggtatggtag gtagccaccca ggcctgggct ccaagagggcag gtaggtgtgt  tctgaattccc gggggcggcag ctggagagag cggggggcga gcttggagga tccagggggc cgtggagagg ccaagtgtag  agaggtttcag gtagacagc tgggtgtc ccaagccagc cagaggcccg gtaggggaagg gttccagggc ttattcttc  ccaaggcctg cagaggcacc ggttaggaag ggtttccagg ctactcag gtagagtaga cagacaaagc ccaagcagcgc  acaagggtgt tttatctg cagagggtgc ctctgctct ctgtgtcagg gtagaggtttg tgtaccacg ccgggtctat ttgtattt  tttttagtag agcttgggtg tcaacccgga gctcttaga cactctcac actgttccat acccagagat ggtatttcaa  ccagcccccac cgtctacccg actcgggttc tggatctct ctgtggggcga acttgagagcc ccaatccag ctctctcc  tgttgacatc gttcccttgg acactgtcc ataccggagg atggatattt aaaccagcccc accgcttacc cgtactcgggt  tctggatctc ctctgtgggc gaactgcgag cccattccc agctctctc ctgtgtgaga tctgtccctta gttgtgtctc tggctctc  cattctctc cagggtgtct ggtctccta gcccgggtga cggcgaatt tctgttatt tcaatcagg gcaatgtgtg tctgtgtgt  ggaattctc tttagagga ggccttgggg ctctgtcaag tcaatctc tccgtggcca ctccctccta cacacacac  ccctgtgc cgaattc</p>
531	Platelet Activating Receptor Homolog (H963)	160889	NM_013308	<p>mqvnpstgpd natlqmlrnp aiavalpvvy slvaa vsipg nlfslwvlcr  rmgprspsvi fminlsvtdl mlasvlpfqi yyhcnrhhwv fgvlcnvvt  vafyanmyss iltmtcive rflglvlypls skrrrrrrya vaacagtllw  lltal splar tdltpvhal giitcfdvkl wtmlpsvamw avflftifl flflpfvity  acytatilk lrttcaahgre qrrravglaa vllafvtcf apnnfvllah  ivrlfygks yyhvnykl tlc lsclnncldp fvyfaserp qlrlreylvc  rrvrpdltdt rreslfsart tsvrseagah pegmeatrf glqrqesvf  gaatcgccg aaagggctt agtctctt gaaagctgc agcaaggctc acagaagata gccccaggt  ttggaggtg tttagaatt gattcttga tcaagctgac tgaagtgga tccgtgtt atacttacc agctaccaa ccttgtagtc  ttagaaatt ttcttca alaaagcagc atcttact tccctcaaga tgaacaaag tctgtctc tgcacgtt ataaagat  ggagccatc acgtattt ttattagt ttctgtt ggaattatg gaaattgtt tgcacactg gctttatc agagaatc  gaatcacagg tggtagga cttactaat taattgtt acagccgat tctgttacc tttggcatta ccaagtagaa tttgttga  cttgggtgtg gcaattgga agctgaagat attccatgc caagtaacag cctgtctat ctatacat atgtattat caattct  cttagcatt tgcagcatt accgtgtct tcaagtaga cagagctgca agatcacg agatcacg aatacaaga cccggattg  ccaaaalgat atcaacctt gttgtgtctaa tggctctct talaatggg ccaaatatga tgaatccat caaagacalc aaggaagagt  caaatgtggg tttagtgga ttataaagg aatttgggaag aaatttggcat tgcgtgaca atttcatatg ttagtagcaat tttaaat  tctagccat cattttaata tccaatgcc ttgaatgc acagctctac agaaacaaag ataatgaaaa ttaccacat gtagaagagg  ctctatcaa calacttta gtagaccagg gctatcat atgtgtt cttaccaca ttgtccgaat cccgttacc ctacgcccaga  cagaagatc aactgattgc tcaacaggga ttactctt caaagccaaa gaggctacac tgccttggc tgggtggaac ctgtgtgtg  atctatct gtactatcac ctctcaaaag catctgcgtc aaaggttact gagaatttg cctcacaa agagaocacag  gctcagaag aaaaatttag atgtgaatat aatgataaaa agacagagatt ttgtgtcta ccaattctg ccttactgga ccaataagtt  aatatagct tgaagata aaaaaaaa aaaaaggggc gc</p>
532	Platelet Activating Receptor	160889	NP_037440.1	<p>mtnsffcpv ykdlpfttyf fylvflvgii gscfatwafi qkntnhrvcs  iylinlltad fltltalpvk ivvdlgvapw klkfhcqv tcltynmyl siiflafvsi  drclqlthsc kyrioepgf akmistvvwl mvllmvpnm miiikdikek</p>



535	161214	Galanin Receptor GalR3	NM_003614	<p>GKRRSLDGS ESAKTSLSQVT NLVSAIVFLY DSLTGVPILV VSFSLKSDS  APPWMVLAVL WCSMAQTLTL PSFIWSCERY RADVRTVWEQ CVAMSEEDG  DDGGGDDYYA EGRVCKVRFD ANGATPGSR DPAQVKLLPG RHMFLFPPLER  VHYLQVPLSR RLSHDETNI STPREGSFL HKWSSDDIR VLPAQSRALG  GPPEYLQQRH RLEDEEDEEE AEGGGLASLR QFLESGVLGS GGGPRGPGF  FREEITTFID ETPLPSPTAS PGHSPPRRPR LGLSPRRLSL GSPESRAVGL PLGLSAGRRC  SLTGGESAR AWGGSWGPN PIFPQLTL</p> <p>tocaggcgc ccgtctgatg gggagatggc tgaigccag aacattcac tggagagccc agggagtggtg gggccgtgg  cagtgctgt ggtcttggc ctaatttcc tgcggggcac agtggggcaat gggcttggtgc tggcagtgct cctgcagct  ggcccgagtg cctggcagga gcctggcagc accagggacc tggtaacct caacctggcg gttgctgaac tctgttcat  cctgtgtgc gttgcttcc agggccacct ciacacgtcg gtagctggc tcttggggc cctgtgtgc aagggccgtgc  acctgtcat ctaactacc atgtacgcca gcagctttac gctggctgt gttccgtgg acaggtacct ggcgtgtgcg  caaccgtgc gctcgcgcgc cctgcgcagc ccgcgtaacg ccgcgcgcgc agtggggcg gttgtgtgc tggcggcgct  cttctggcg cctactca gctactacgg caccgtgcgc taccggcggc tggagctctg cgtgcgcgc tggagggag  cgcccgccg cgccctggac gttggcaact tggctggccgg ctaactgtcg ccgtgtgtg tggtagct ggcctacggg  cgcacgtgc gcttctgt ggcgcgcgtg gttccgcgg ggcggggcg ggcggggcg cggcgggaggg cgacggggcg  cgcgggggcg gccaigtctg cgggtggccg gctctacgg cttgtgtgg gtcagacca cgcgtctalc ctgtcttct  ggtacggcg cttgcttc agcccgcca cctacgcctg ccgcctggcc tcaactgc tggcctacgc caactctgc  ctaacccg tggctacgc gctgcctcg cgccacttc ggcgcgcctt ccgcgcgc tggcgtgtg gcccgcggag  ccgcacagt ggcgcgcgc cctgcgcgc cgttcgcgc gctccgcgc ggcacacccg ctgcccggga gacgcggcg  ctagcggggg gctgtgtgt ggtggcgccg agggcccgga gccagggag ggaacccgtc acggcgga ggcgtgcga  ggacgggaat aaacctgc gcctggact gcctgt</p> <p>MADAQNISLD SPGSVGAVV PVVAFILFL GTVGNGL VLA VLLQPGPSAW  QEPGSTIDL ILNLAVADLC FILCCVPFQA TTYTLDWLF GALVCKAVHL  LIYLTMYASS FTAAVSVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA  ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAWV  SLAYGRTLRF LWAAVGPAGA AAARRRAT GRAGRAMLAV AALYALCWGP  HHALILCFWY GRFAFSPATY ACRASHCLA YANSCLNPLV YALASRHFA  RFRRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEAAARGPE</p> <p>atggcgctga ccccgagtc ccgagcagc ttccctgggc tggccggcac cggcagctct gttccggagc cgcctggcg  cccaacga acctaacca gctctgggc cagcccgacc gtagccagct cctggagga cctggggcc acgggacca  ttgggact gcttcggcc atggcggtgg tggcggtgg gggcaacgc taccagctgg tggtaacct cggctccctg  cgtcggtgg cctcagta cgtctacgt gtaacctgg cgttggccga cctgtgtac ctgtcagca tcccttcat  cgtggccac taccacca aggaagtga cttcggggac gttgggtgc gctgtctt cggcctggac ttctgacca  tgcagcag calcttcag ctgaacctca tgaagcagca gctctacgt gctgtgtc ggcgtgtc gacccgtcag  cgcccaagg gctacggcaa gctctggcg ctgggcaact ggtgtgtc gctgtgtc acgtgtccg tgaigtgtc  caltgggtc gttcgccgg gttccaaagg cttgtgtc cccgttgg ccgcgcgc ccaaccggcc taccgtacgc  tgtcttgc caccagc gtcggggccg ggtgtgtcat ctgggtgtc taccggcc tggcccgcc ctaccggc  tgcagcgcg cctctcaa gcgggcccg cggccggggc cggcgcgct gtcggcagc tgggtgtctt</p>	A	Homo sapiens
536	161214	Galanin Receptor GalR3	NP_003605.1	<p>QEPGSTIDL ILNLAVADLC FILCCVPFQA TTYTLDWLF GALVCKAVHL  LIYLTMYASS FTAAVSVDR YLAVRHPLRS RALRTPNAR AAVGLVWLLA  ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAWV  SLAYGRTLRF LWAAVGPAGA AAARRRAT GRAGRAMLAV AALYALCWGP  HHALILCFWY GRFAFSPATY ACRASHCLA YANSCLNPLV YALASRHFA  RFRRLWPCGR RRRHRARRAL RRVRPASSGP PGCPGDARPS GRLLAGGGQG  PEPREGPVHG GEAAARGPE</p> <p>atggcgctga ccccgagtc ccgagcagc ttccctgggc tggccggcac cggcagctct gttccggagc cgcctggcg  cccaacga acctaacca gctctgggc cagcccgacc gtagccagct cctggagga cctggggcc acgggacca  ttgggact gcttcggcc atggcggtgg tggcggtgg gggcaacgc taccagctgg tggtaacct cggctccctg  cgtcggtgg cctcagta cgtctacgt gtaacctgg cgttggccga cctgtgtac ctgtcagca tcccttcat  cgtggccac taccacca aggaagtga cttcggggac gttgggtgc gctgtctt cggcctggac ttctgacca  tgcagcag calcttcag ctgaacctca tgaagcagca gctctacgt gctgtgtc ggcgtgtc gacccgtcag  cgcccaagg gctacggcaa gctctggcg ctgggcaact ggtgtgtc gctgtgtc acgtgtccg tgaigtgtc  caltgggtc gttcgccgg gttccaaagg cttgtgtc cccgttgg ccgcgcgc ccaaccggcc taccgtacgc  tgtcttgc caccagc gtcggggccg ggtgtgtcat ctgggtgtc taccggcc tggcccgcc ctaccggc  tgcagcgcg cctctcaa gcgggcccg cggccggggc cggcgcgct gtcggcagc tgggtgtctt</p>	P	Homo sapiens
537	161221	Urotensin-II Receptor (GPR14)	NM_018949	<p>atggcgctga ccccgagtc ccgagcagc ttccctgggc tggccggcac cggcagctct gttccggagc cgcctggcg  cccaacga acctaacca gctctgggc cagcccgacc gtagccagct cctggagga cctggggcc acgggacca  ttgggact gcttcggcc atggcggtgg tggcggtgg gggcaacgc taccagctgg tggtaacct cggctccctg  cgtcggtgg cctcagta cgtctacgt gtaacctgg cgttggccga cctgtgtac ctgtcagca tcccttcat  cgtggccac taccacca aggaagtga cttcggggac gttgggtgc gctgtctt cggcctggac ttctgacca  tgcagcag calcttcag ctgaacctca tgaagcagca gctctacgt gctgtgtc ggcgtgtc gacccgtcag  cgcccaagg gctacggcaa gctctggcg ctgggcaact ggtgtgtc gctgtgtc acgtgtccg tgaigtgtc  caltgggtc gttcgccgg gttccaaagg cttgtgtc cccgttgg ccgcgcgc ccaaccggcc taccgtacgc  tgtcttgc caccagc gtcggggccg ggtgtgtcat ctgggtgtc taccggcc tggcccgcc ctaccggc  tgcagcgcg cctctcaa gcgggcccg cggccggggc cggcgcgct gtcggcagc tgggtgtctt</p>	A	Homo sapiens

[illegible]

542	161251	Purinergic Receptor P2Y10	NP_055314.1	<p>accctccg atttactt acatcagcca ccactggcct ttccagagag cccttgcct gctctgcttc taactgaagt atctcaacat  gtaigccagc atttctcc tgaagtgcat cagcttcaaa aggttgcttt ttctctcaaa gccctcagg gccagagact ggaagcgtag  gtacagtg ggcacatg ctcgcatcgt gactgctg gggactgct gttgccatt tccatctg agaaacacag  acttaaaaca caacaagtcc tcttctgctg atcttgata caagcaaaatg aatgcatgct cgttgctgctg gtagattaca gttctgagc  ttgcaaggatt tgtatocca gtgatcaica tgcgcatgctg taacttgaaa actactaat ccttgagaca gccaccaatg gcttccaag  ggatcagtag gaggcagaaa gcatcgcgga tgggttcat gttgctgca gttcttca tctgctcacc ccttttgc ctggtcctg  tttttacc catggaaa gaaacatca ttgcatgtg tccgtgtc cgaatgcac tgratttcca ccttttgc ctggtcctg  caagtctg ctgctttg gtaaccaic ttattact tatgcttca gatttctg accaatat ccgccatggc agttctgtag  ccgctccg cctcagagc aaggagagtg gttacat gatggctaa  MANLDKYTET FKMGSNSTST AEYCNVTNV KFQYSLYATT YLIFIPGILL P Homo sapiens</p> <p>ANSAALWVLC RFISKKNKAI IFMINLSVAD LAHVLSPLR IYYVISHHWP  FORALCLLCF YLYLNMYAS ICFLTCLISQ RCFFLLKPR ARDWKRRYDV  GISAAIWVV GTACLPFIL RSTDLNNKS CFADLGYKQM NAVALVGMIT  VAELAGFVP VIIAWCTWK TTISLRQPPM AFQGISERQK ALRMVFMCAA  VFFICFTPYH INEIFYTMVK ETIUSCPVV RIALYFHPFC LCLASLCLL DPILYYFMAS  EFRDQLSRHG SSVTRSLMS KESGSSMIG  MATTSATSTV NTSSLATMT TNFTSLTST VTTIASLVPS TNSSEDYYDD P Equine herpesvirus 2</p> <p>LDDVDEESA PCYKSDITRL AAQVVPALYL LVFLGLLGN ILVVIIVRY  MKIKNLTNML LLNLASDLL FLTLFPWMH YIGMYHDWTF GISLCKLLRG  VCYMSLYSQV FCILLTVDR YLA VYAVTA LRFRVTTCGI VTCVCTWFLA  GLLSLPEFFF HGHQDDNGRV QCDPYPEMS TNVWRRAHVA KVMLSLILP  LLIMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYFVF WTPYNIVLL  STFHATLLNL QCALSSNLDL ALLITKTWAY THCCINPVIY AFVGEKFRRH  LYHFFHTYVA IYLCKYIPFL SGDGEKGP TRI</p>
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>gcgagaacc cgaatgacc gggccacggc ggcctccoga cctgcgcgt cctgcggggc gcgctgggct ccgggcacac  gggctlgccc cccatggct cgcgcgcggg gaactgagc gcgtggccgg gcgtgggggt gcgcgcggc gcgcgctga  ggaaactgac ctctcccg gccccgaccc cgtcccgct cccggccccc tctgtggagc cctgcgcggc ccccgccccc  gcgcaccgt tctgcagcc gccctggccc gttgcgctct ggtcgtctgc ctacggcgcc gttgtggccc tggcgggtct  cggcaacctc gttgtgact ggaatcggtt ggcocacaa cgcagcgga cgttcacca ctctcttc gttgaacctgg  cttgcgga cgcgcgcatg gccgcgctca acgcgctggt caacttcat tacgcgctgc acggagagtg gtaactggc  gccaaactat ggcgcttcca gaacttct cccatcac cgtgttgc cagcatcac tccatgacg ccatgcggt  ggacagat acggccat ttgacccct gaagccagg cgtctgcca cggccaccc gatactt ggaagcat  ggatctggc atttactt gcatctct agttctgta ttcaaaatc aaagtacgc caggccgtac tcttgcac gttcagtg  cagaaggctc aaggcaacat ttacgtacc acatgact catgctct gttactct tcttctc catcagggc atcacctaca  ccatgcttg aatcagctc tggggagggg agatccagg agacacctg gaacagttacc agggagcagct gaaggccaaag  cggaaagggt taaaatgat gatcatgtt gttgtgact ttgccatg cttgtccg acggagagtg gtaactat caccgcatc  tatcagcag tgaacagggt gaalacatc cagcaggtct acctggccag ctctggctg gccatgact cgaacatgta  caacccatc atctactgt gttgaataa gaggatttct gttgcttca agaggggctt ccgctgggtc ctttacc acgtctcag  ctacgagag ctggagctca aagccacag gctccacca atggcagaga ggcagctata cacagtga agaatgtagt  ccatgagcgt ggtattgac tcaacagat gggacagtg caggtcagt caccagaga gaggagcagc cagagcagta</p>
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>gcgagaacc cgaatgacc gggccacggc ggcctccoga cctgcgcgt cctgcggggc gcgctgggct ccgggcacac  gggctlgccc cccatggct cgcgcgcggg gaactgagc gcgtggccgg gcgtgggggt gcgcgcggc gcgcgctga  ggaaactgac ctctcccg gccccgaccc cgtcccgct cccggccccc tctgtggagc cctgcgcggc ccccgccccc  gcgcaccgt tctgcagcc gccctggccc gttgcgctct ggtcgtctgc ctacggcgcc gttgtggccc tggcgggtct  cggcaacctc gttgtgact ggaatcggtt ggcocacaa cgcagcgga cgttcacca ctctcttc gttgaacctgg  cttgcgga cgcgcgcatg gccgcgctca acgcgctggt caacttcat tacgcgctgc acggagagtg gtaactggc  gccaaactat ggcgcttcca gaacttct cccatcac cgtgttgc cagcatcac tccatgacg ccatgcggt  ggacagat acggccat ttgacccct gaagccagg cgtctgcca cggccaccc gatactt ggaagcat  ggatctggc atttactt gcatctct agttctgta ttcaaaatc aaagtacgc caggccgtac tcttgcac gttcagtg  cagaaggctc aaggcaacat ttacgtacc acatgact catgctct gttactct tcttctc catcagggc atcacctaca  ccatgcttg aatcagctc tggggagggg agatccagg agacacctg gaacagttacc agggagcagct gaaggccaaag  cggaaagggt taaaatgat gatcatgtt gttgtgact ttgccatg cttgtccg acggagagtg gtaactat caccgcatc  tatcagcag tgaacagggt gaalacatc cagcaggtct acctggccag ctctggctg gccatgact cgaacatgta  caacccatc atctactgt gttgaataa gaggatttct gttgcttca agaggggctt ccgctgggtc ctttacc acgtctcag  ctacgagag ctggagctca aagccacag gctccacca atggcagaga ggcagctata cacagtga agaatgtagt  ccatgagcgt ggtattgac tcaacagat gggacagtg caggtcagt caccagaga gaggagcagc cagagcagta</p>





545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	<p>ttaaaatatt taaaatcat atgaaaat</p> <p>MASPAAGNL SA WPGWGWPPPA ALRNLTSPPA PTASPPAPS WTPSPRPSPA HPFLQPPWAV ALWSLAYGAV VAVAVLGNLV VIWVLAHNR MRTVTNSFLV NLAFADAAMA ALNALVNFY ALHGEWYFGA NYCRRFQNFPP ITAVFASIYS MTAIAVDRYM AIIDPLKPRL SATATRIVIG SIWILAFLLA FPQCLYSKIK VMPGRTLCTV QWPEGSRQHF TYHMIVIVLV YCFPLLMGI TYTIVGHTLW GGEIPGDTCD KYQEQLKAKR KVVKMMIIV VFAICWLPY HIYFILTAIY QQLNRWKYIQ QVYLASFVLA MSSTMNYPY YCCLNKRFR GFKRAFRWCP FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVVVFDSD NQDGSARSSH QKRGTTTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS</p> <p>atggatgaaa caggaaatct gacagatct tctgccacat gccatgacac tatgtagac ticcgaatc aagtgtatc cactgtgac tctatgatct cgtgtgtag cttcttggc aatggcttgg tgcctatgt cctcaataaa acctatcaca agaatgacac cttccaagta tacaatgatta atttagcagt agcagatcta cttgtgtgt gacacatgac tctccgtgtg gctatattg ttcacaaagg catttggtc tttggtagct tcttggccg cctcagcacc tatgtctgt atgtcaacct ctattgtac atctctta tgacagccat gagcttttc cgtgtcatgt caatgtttt tccagtcacg aacattaat tggttacaca gaaaaaagcc aggtttgtgt gtttaggtat ttggatttt gtgattttga ccagttctcc atttcaatg gccaaaccac aaaaagatga gaaaaataat accaagtgt ttgagccccc acaagacaaat caaaciaaaa atcatgtttt ggtctgtcat tatgtgtcat tttgtttgg cttatcatc cttttgtta ttaataatgt ctgttacaca atgatcattt tgccttact aaaaaatca atgaaaaaaa atcgtgcaag tcaataaaaag gctataggaa tgaatcattgt cgtgacccgt gcccttttag tcatgttcat attcaatcat attcaatgta tttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt tgatctgtc ctgaatgac agaatgcccgt ggtcatalacc ttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt ttctgggggt aacttttag aaaaagctgtc tacaatcaga aagcatctt tgcacagct gacttatgta cccagaaaaga aggcctctt gccagaaaaa ggagaaagaa tatgtaaatgt atag</p> <p>MDETGNLTVS SATCHDITDD FRNQVYSTLY SMISVVGFPG NGFVLVYLIK TYHKKSFAQV YMINLA VADL LCVCTPLRV VYVYHKGIVL FGDFLCRLST YALYVNLVCS IFFMTAMSF RCIAIVFPVQ NINLVTOKKA RFVCGIWF VIL-TSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVVLVH YVSLFVGFII PFVIIVCYT MIL-TLLKKS MKKNLSSHKK AIGMMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCDF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKA SLPEK GEEICKV</p> <p>ccacgcgtcc gccggctgtga cgtgtgcacc ggacagcgggt caggctccgg cttctctcc cgtgcagcag ccgcgtgccc ggcccccactg ggctcggatc cggcccccgg cccctcggca ccgcctgtc tggccccggc cccggccccg cggaccatgc gcttggcggcc cccaggggaa acccgaccg gccaaaggcc cgtcaagacc aggtctccgg gcccggggccc cttccggccc ccacgtctc ggccggccg cttccccgg tcccgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc ggccggcggaa cgtctcgggg gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gctgtgtgtt ccgcgtctat ggctgtgtct atcgtgtgtt cgtgtgtgtt caacgtgtgt gtcgtgtgt cttctgtgt cgtgtgtgt cttccgacc agaaacatt cttctgtct aacctgtcc tctcgtgt cctcgtgt gcttctgt tccactgt tttatccat gttctgtacag gccgtgtgt cttggccgg cttgcctgtga agctgtgtt gttgtgtgt tacctgtgt gcaacctct tgccttcaac atcgtgtctca ttagttaga cgtgtgtgt tgggtcaccc gtaggtgtgt ataccggggc cagcaggggt acacgggg ggacaggtgtt aagatgtgt tgggtgtgt gctgtgtgt cgtgtgtgt gaccagccat cctgtgtgtt gtaggtgtt cccgggggg cttccatccc gtaggtgtt gtaggtgtt gtaggtgtt</p>	P	Homo sapiens
546	177168	Cysteinyl Leukotriene CYSLTI Receptor	NM_006639	<p>atggatgaaa caggaaatct gacagatct tctgccacat gccatgacac tatgtagac ticcgaatc aagtgtatc cactgtgac tctatgatct cgtgtgtag cttcttggc aatggcttgg tgcctatgt cctcaataaa acctatcaca agaatgacac cttccaagta tacaatgatta atttagcagt agcagatcta cttgtgtgt gacacatgac tctccgtgtg gctatattg ttcacaaagg catttggtc tttggtagct tcttggccg cctcagcacc tatgtctgt atgtcaacct ctattgtac atctctta tgacagccat gagcttttc cgtgtcatgt caatgtttt tccagtcacg aacattaat tggttacaca gaaaaaagcc aggtttgtgt gtttaggtat ttggatttt gtgattttga ccagttctcc atttcaatg gccaaaccac aaaaagatga gaaaaataat accaagtgt ttgagccccc acaagacaaat caaaciaaaa atcatgtttt ggtctgtcat tatgtgtcat tttgtttgg cttatcatc cttttgtta ttaataatgt ctgttacaca atgatcattt tgccttact aaaaaatca atgaaaaaaa atcgtgcaag tcaataaaaag gctataggaa tgaatcattgt cgtgacccgt gcccttttag tcatgttcat attcaatcat attcaatgta tttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt tgatctgtc ctgaatgac agaatgcccgt ggtcatalacc ttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt ttctgggggt aacttttag aaaaagctgtc tacaatcaga aagcatctt tgcacagct gacttatgta cccagaaaaga aggcctctt gccagaaaaa ggagaaagaa tatgtaaatgt atag</p> <p>MDETGNLTVS SATCHDITDD FRNQVYSTLY SMISVVGFPG NGFVLVYLIK TYHKKSFAQV YMINLA VADL LCVCTPLRV VYVYHKGIVL FGDFLCRLST YALYVNLVCS IFFMTAMSF RCIAIVFPVQ NINLVTOKKA RFVCGIWF VIL-TSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVVLVH YVSLFVGFII PFVIIVCYT MIL-TLLKKS MKKNLSSHKK AIGMMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCDF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKA SLPEK GEEICKV</p> <p>ccacgcgtcc gccggctgtga cgtgtgcacc ggacagcgggt caggctccgg cttctctcc cgtgcagcag ccgcgtgccc ggcccccactg ggctcggatc cggcccccgg cccctcggca ccgcctgtc tggccccggc cccggccccg cggaccatgc gcttggcggcc cccaggggaa acccgaccg gccaaaggcc cgtcaagacc aggtctccgg gcccggggccc cttccggccc ccacgtctc ggccggccg cttccccgg tcccgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc ggccggcggaa cgtctcgggg gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gctgtgtgtt ccgcgtctat ggctgtgtct atcgtgtgtt cgtgtgtgtt caacgtgtgt gtcgtgtgt cttctgtgt cgtgtgtgt cttccgacc agaaacatt cttctgtct aacctgtcc tctcgtgt cctcgtgt gcttctgt tccactgt tttatccat gttctgtacag gccgtgtgt cttggccgg cttgcctgtga agctgtgtt gttgtgtgt tacctgtgt gcaacctct tgccttcaac atcgtgtctca ttagttaga cgtgtgtgt tgggtcaccc gtaggtgtgt ataccggggc cagcaggggt acacgggg ggacaggtgtt aagatgtgt tgggtgtgt gctgtgtgt cgtgtgtgt gaccagccat cctgtgtgtt gtaggtgtt cccgggggg cttccatccc gtaggtgtt gtaggtgtt gtaggtgtt</p>	A	Homo sapiens
547	177168	Cysteinyl Leukotriene CYSLTI Receptor	NP_006630.1	<p>atggatgaaa caggaaatct gacagatct tctgccacat gccatgacac tatgtagac ticcgaatc aagtgtatc cactgtgac tctatgatct cgtgtgtag cttcttggc aatggcttgg tgcctatgt cctcaataaa acctatcaca agaatgacac cttccaagta tacaatgatta atttagcagt agcagatcta cttgtgtgt gacacatgac tctccgtgtg gctatattg ttcacaaagg catttggtc tttggtagct tcttggccg cctcagcacc tatgtctgt atgtcaacct ctattgtac atctctta tgacagccat gagcttttc cgtgtcatgt caatgtttt tccagtcacg aacattaat tggttacaca gaaaaaagcc aggtttgtgt gtttaggtat ttggatttt gtgattttga ccagttctcc atttcaatg gccaaaccac aaaaagatga gaaaaataat accaagtgt ttgagccccc acaagacaaat caaaciaaaa atcatgtttt ggtctgtcat tatgtgtcat tttgtttgg cttatcatc cttttgtta ttaataatgt ctgttacaca atgatcattt tgccttact aaaaaatca atgaaaaaaa atcgtgcaag tcaataaaaag gctataggaa tgaatcattgt cgtgacccgt gcccttttag tcatgttcat attcaatcat attcaatgta tttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt tgatctgtc ctgaatgac agaatgcccgt ggtcatalacc ttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt ttctgggggt aacttttag aaaaagctgtc tacaatcaga aagcatctt tgcacagct gacttatgta cccagaaaaga aggcctctt gccagaaaaa ggagaaagaa tatgtaaatgt atag</p> <p>MDETGNLTVS SATCHDITDD FRNQVYSTLY SMISVVGFPG NGFVLVYLIK TYHKKSFAQV YMINLA VADL LCVCTPLRV VYVYHKGIVL FGDFLCRLST YALYVNLVCS IFFMTAMSF RCIAIVFPVQ NINLVTOKKA RFVCGIWF VIL-TSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVVLVH YVSLFVGFII PFVIIVCYT MIL-TLLKKS MKKNLSSHKK AIGMMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCDF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKA SLPEK GEEICKV</p> <p>ccacgcgtcc gccggctgtga cgtgtgcacc ggacagcgggt caggctccgg cttctctcc cgtgcagcag ccgcgtgccc ggcccccactg ggctcggatc cggcccccgg cccctcggca ccgcctgtc tggccccggc cccggccccg cggaccatgc gcttggcggcc cccaggggaa acccgaccg gccaaaggcc cgtcaagacc aggtctccgg gcccggggccc cttccggccc ccacgtctc ggccggccg cttccccgg tcccgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc ggccggcggaa cgtctcgggg gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gctgtgtgtt ccgcgtctat ggctgtgtct atcgtgtgtt cgtgtgtgtt caacgtgtgt gtcgtgtgt cttctgtgt cgtgtgtgt cttccgacc agaaacatt cttctgtct aacctgtcc tctcgtgt cctcgtgt gcttctgt tccactgt tttatccat gttctgtacag gccgtgtgt cttggccgg cttgcctgtga agctgtgtt gttgtgtgt tacctgtgt gcaacctct tgccttcaac atcgtgtctca ttagttaga cgtgtgtgt tgggtcaccc gtaggtgtgt ataccggggc cagcaggggt acacgggg ggacaggtgtt aagatgtgt tgggtgtgt gctgtgtgt cgtgtgtgt gaccagccat cctgtgtgtt gtaggtgtt cccgggggg cttccatccc gtaggtgtt gtaggtgtt gtaggtgtt</p>	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	<p>atggatgaaa caggaaatct gacagatct tctgccacat gccatgacac tatgtagac ticcgaatc aagtgtatc cactgtgac tctatgatct cgtgtgtag cttcttggc aatggcttgg tgcctatgt cctcaataaa acctatcaca agaatgacac cttccaagta tacaatgatta atttagcagt agcagatcta cttgtgtgt gacacatgac tctccgtgtg gctatattg ttcacaaagg catttggtc tttggtagct tcttggccg cctcagcacc tatgtctgt atgtcaacct ctattgtac atctctta tgacagccat gagcttttc cgtgtcatgt caatgtttt tccagtcacg aacattaat tggttacaca gaaaaaagcc aggtttgtgt gtttaggtat ttggatttt gtgattttga ccagttctcc atttcaatg gccaaaccac aaaaagatga gaaaaataat accaagtgt ttgagccccc acaagacaaat caaaciaaaa atcatgtttt ggtctgtcat tatgtgtcat tttgtttgg cttatcatc cttttgtta ttaataatgt ctgttacaca atgatcattt tgccttact aaaaaatca atgaaaaaaa atcgtgcaag tcaataaaaag gctataggaa tgaatcattgt cgtgacccgt gcccttttag tcatgttcat attcaatcat attcaatgta tttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt tgatctgtc ctgaatgac agaatgcccgt ggtcatalacc ttgtcttgg cttgctccaa ttgtgtctt gacctctcc tatattctt ttctgggggt aacttttag aaaaagctgtc tacaatcaga aagcatctt tgcacagct gacttatgta cccagaaaaga aggcctctt gccagaaaaa ggagaaagaa tatgtaaatgt atag</p> <p>MDETGNLTVS SATCHDITDD FRNQVYSTLY SMISVVGFPG NGFVLVYLIK TYHKKSFAQV YMINLA VADL LCVCTPLRV VYVYHKGIVL FGDFLCRLST YALYVNLVCS IFFMTAMSF RCIAIVFPVQ NINLVTOKKA RFVCGIWF VIL-TSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVVLVH YVSLFVGFII PFVIIVCYT MIL-TLLKKS MKKNLSSHKK AIGMMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCDF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKA SLPEK GEEICKV</p> <p>ccacgcgtcc gccggctgtga cgtgtgcacc ggacagcgggt caggctccgg cttctctcc cgtgcagcag ccgcgtgccc ggcccccactg ggctcggatc cggcccccgg cccctcggca ccgcctgtc tggccccggc cccggccccg cggaccatgc gcttggcggcc cccaggggaa acccgaccg gccaaaggcc cgtcaagacc aggtctccgg gcccggggccc cttccggccc ccacgtctc ggccggccg cttccccgg tcccgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc ggccggcggaa cgtctcgggg gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gtcgtgagcc gctgtgtgtt ccgcgtctat ggctgtgtct atcgtgtgtt cgtgtgtgtt caacgtgtgt gtcgtgtgt cttctgtgt cgtgtgtgt cttccgacc agaaacatt cttctgtct aacctgtcc tctcgtgt cctcgtgt gcttctgt tccactgt tttatccat gttctgtacag gccgtgtgt cttggccgg cttgcctgtga agctgtgtt gttgtgtgt tacctgtgt gcaacctct tgccttcaac atcgtgtctca ttagttaga cgtgtgtgt tgggtcaccc gtaggtgtgt ataccggggc cagcaggggt acacgggg ggacaggtgtt aagatgtgt tgggtgtgt gctgtgtgt cgtgtgtgt gaccagccat cctgtgtgtt gtaggtgtt cccgggggg cttccatccc gtaggtgtt gtaggtgtt gtaggtgtt</p>	A	Homo sapiens

549	177191	Histamine H3 Receptor	NP_009163.1	<p>aactcgttact tccatcaac ggcctccacc ctggaggttct ttacggocctt cctcagcgtc acctcttta accctcagcat ctactgaac  atccagaagg gcacccgctt ccggcttggat gggtgctctgag aggcagccagg ccccgagccc cctcccgaggg cccagccctc  accaccccca ccgctctggct gctggggctctg ctggcagaag ggccacaggggg aggcacatgccc gctggcagcagg tatggggggg  ggaggggggg cgttggggctt gaggccgggg aggcggaacct cgggggggggg ggtgggggggg gctccggggg ttacccacc  tccagctccg gcagctcttc gagggggacct gtaggggggg gctcactcaa gaggggggctcc aagccgctgg cgtctcggg  ctggctgggag aagcggcatga agatgggttc ccaaggttc accagcgtt ttggctggc tggggggggg aaggggggcca  agctggggg cgtcagctgg agcatcttg gggtctggctg ggccccatcc agcctggctga tgaatccg ggccggctgg  catgggacct gggtccctga ctactggat gaacctctt ttgggtctct ttgggggcaac ttgggtgta acctgtctt  ctacctctg tgcacacaca gcttccgggg gggtctac accgttccac aagctgctct gcccacagaa gctcaaatc cagccccaca  gctccctggg gcatctggg aagtgagggg cccacacagag cctccctcag ccccgctct ctacggcccag gctcctgggg  catctggccc tggctggccc taccgggctc gttcccccag gggtgggggg ctcacgggtt ggagctgggggg ctgggtgggg  cggcaggccc cctggcaggg agggccctc ctgggtgggg cagggggggg ctcacgggtt ggagctgggggg ctgggtgggg  ggccgggg cccacatct gggtccacgg ggcagggggg gctgggtctt ttgggtctct ttgggggggg cctctggc  ccacccctc gcatgtact gggtgggg ttcccaagg aggcacctgg ggtgggttcca gggtctctgg cctagcagtt tggcttggca  cgtgcacaca cctgcacaca cctgcacaca gtcctctcc ccgggcaagg ccaggacact gcttggctg  cctctgct ctgcataag cctcaggctt ggcccttca cctcttcc caccacact ctctggccc aaggggttca agggggccct  gggaacctga agctgtctc tgccttcca ttctgggtt ttccagaaag atggaagagga aacacatgt ctggacttga tttctgggg  atgttaac aagagagaca aaatgctga ggaagctcagg gctgggtggg cagggtgggg cttccacgg cctctccct  cgtcagggt tccggctgg ctgtggcagg tggcttggcc caccggctt ctggggctac accagccctg gggtggcagg  ctggcccggg cactgttt gctacccag gaccttggg ggtgttgggg aggagggggg ccggctgggg ccgaggggtc  caggcgtgg agggggggg caggaggggt gcccggggcagg gggtggggg gccaigtgt gtcacccgt gcccggct  ctggctc ctctggctt gcccgtggg ctggccctga aaccgtggg tcaataaaa ggtatatt ttataaaaaa  aaaaaaaaa aaaaaaaa</p>	P	Homo sapiens
550	177387	G Protein- Coupled Receptor ORF4	NM_020155	<p>MERAPPDGPL NASGALAGDA AAAGGARGFS AAWTAVLAAL MALLIVATVL  GNALVMLAFV ADSSLRTQNN FFLNLAISD FLVGAFCIPL YVPYVLTGRW  TFGRGLCKLW LVVDYLLCTS SAFNIVLSY DRFLSVTRAV SYRAQQGDTR  RAVRKMLLVW VLAFLYGA ILSWEYLSGG SSIPEGHYA EFFYNWYFLI  TASTLEFFTP FLSVTFNLS IYLNQRRTR LRLDGAREAA GPEPPPEAQ SPPTPPGCGWG  CWQKGHGEAM PLHRYGVGEA AVGAEGEAT LGGGGGGSV ASPTSSSGSS  SRGTERPRSL KRSGKPSASS ASLEKRMKMV SQSFTQRFRL SRDRKVAKSL  AVIVSIFGLC WAPYTLMMI RAAACHGHCVP DYWYETSWL L WANSVNPV  LYPLCHHSFR RAFTKLLCPQ KLKIQPHSSL EHCWK</p> <p>agcggcgct ggcctgaccc gacgggtatc agccggctct cccctccac ccaggagcga calgaacgac ctagggcagg  gagctctc ctggggctc ttgaccccc catctggc ttggggggag gcccaggggg gtagacaccc caacccat  ccggctc ctggagagaaa gtagactggccc ttccalgccc ctgagtgagg ggctgggggg caggctgctt ggttcccca  agggcagggg ttctctgt gaggaggggg ggcttcagc cacaactct ttctctga ggcccccac ttctctg  caccctgcaa ttccacccc tccgtattta ttccctgggt cccggcgaca gttccctctt gttctctc gggttcagg cctccctcc  tgaatggag agtaacctgt ctggctgggt gctggctggc gggtgggg ctggctgggt acctctgg accctgggg  tgacagcgg ctacacacc ctgtagggcc tggctctt ctccgtat gcccagctt gggtgggt tctgtatgg cacaagcgtc  tcagtatca gacgggtt ctggccctt gctgtctg ggccggctt cgtacaccc ttctctct ctactccg gataccccc</p>	A	Homo sapiens

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>ggcccaaccg cctggggccc ttgccttctt ggccttctta ctgttgcccc gtcgtctgc agttttcac cttagacctt atgaacctt actttggcca ggttggtgtc aaggccaagg tgaagcgtcg gccaagatg agccaggaggt tgcctgtgtt ccgaggggccc ttgtggggg cctcgtgtt ctttctgt gtagacgtgc tgtgtgtgt gctctccat cggcgcgccac agccctgggc cctgtgtt gtccgctcc tggtagcga cctcgttc gtcattcgc cgtctgtt tgcgtcctgc cttcgtcctgc tgcagcggg ggccttca ctacatcta cctggaggcc aaggtagggc tgcagcagc atgcccaggt gcttttggg tctctggcca gggtttca ggggttagg</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTL YALLFFS VYAQLWL VLL YGHRLSYQT VFLALCLLWA ALRITLFSFY FRDTPRANRL GPLFWLLYC CPVCLQFFTL TLMNLVFAQV VFKAKVKRRP EMSRGLLAVR GAFVGASLLF LLVNVLCAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>ctctttaaa ttctttcta ggaigtccac ttcttcca caatgaatga ggttcacat gacaagcaca tggactttt ttataatagg agcaacacig atacttoga tgcattggaca ggaacaagg tttgtattgt ttgtgtgt gggacgttt tctgcctgt tatttttt tctaatctc tggicalgc ggcagtgatc aaaaacagaa aatttcatt cccctttac taccgttgg ctaatttagc tgcgtccgat ttcttgcgt gaaatggctta tttattcttg algtttaaca caggccacag ttcaaaaact ttgactgtca accgttgtgt tctcgtcag gggcttctgg acagttagctt gactgtctcc ctaccaact tgcgtgttat cgtcgttggag aggcacatgt caatcatgag gatcgcgctc catagcaacc tgaacaaaa gagggttgaca ctgtcattt tgcctgtcgt gggccatgcgc attttatgg gggcgctcc cacactgggc tgggaattgc ttgtcaacat cttcgtcctgc tctccttgg ccccaatta cagcaggaggt tacctgttt tctggacagt gtcaacdc algcgttcc tcatcaggt tgtgtgtgtac ctgcgtatc acgtgtacgt caagagaaaa accaagctt tgcctccga tacaagtggg tcatcagcc ggcggaggac accatgaag ctaatgaaga cgtgtgtgac tgttttaggg gctgttggg tatctggac ccggggcctg gttgtctgc tctcgtacgg cdtgaactgc aggcaggtgt gctgtcagca tttgaaaaagg tgttctcgt tgcgtggcgt gctcaactcc tgcgtgaacc ccatcatcta ctctacaag gacgagagaca tttatggcac catgaagaag atgatctgt cttctctca gtagaagacca gtagggcgct cctctcgcat cccctcaca gtctcagca gtaggtgacac aggcagocag tacatagagg atagtattag ccaagggtgca gtctgcaata aagcacttc ctaaacttg galcctc ggcacacca ggtgtgact gtcttag</p> <p>MNECHYDKHM DFFYNRSNTD TVDDWTGTLK VIVLCVGTFF CLFIFFNSNL VIAAVKNRK FHEPFYLLA NLAAADFFAG IAYVLFMNT GPVSKTLTVN RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMVRHSNL TKKRVTLIL LVWAIAMFG AVPTLGNL CNISACSSLA PIYSRYLVF WTVSNLMAFL IMVVYLYR VYVKRKTNVL SPHTSGSISR RRTPMKLMKT VMTVLGAFV CWTPGLVLL LDGLNCRQCG VQHKRWFL LALLNSVNP IITYSKDEDM YGTMKKMICC FSQENPERRP SRIPSTVLSR SDTGSQYIED SISQGAVCNK STS</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>atggggcccc gcaagcgct cgtggcggtt cttctgtga tggtagggc cgtggcgctg ctatcaacg cactgtgtgt gctttgtgc gcttcaagcg ctgagctccg cactcagcc tcaaggctcc tctgtgtgaa tctgtctcgg gggcaacctgc tgcgtgggc gctgtgacatg ccttcaagc tgcgtgtgt gtagcgcgcg cgtgaacaccgt cggcgccggc cgcaltgcaa gtcatgtgtt tctgtgacac cttcttgccg tccaacgccc cgtcgaagcgt ggcgcgcgtg agcgcagacc agtggctggc agtggcgctc ccactgcgt acgcggagac cctggcgacc cgtatggcg gctgtgtgt gggctgtggc tggggacagt cgtgtgctt ctacgtgcgt gactgtgtt gctcgtgggt tggctacag agcgctcgt cgtcgtgt gctgtgctg ccggccagagc ctgagcgctc ggccttgcca gcttccacg ccacgttcca tgcgtgggc ttggtgtgc cgtgtggcgt gctgtgctc accctgctcc aggtgacacg ggtggcagac agacatgac agcagatgga caccgtcac atgaaggcg</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>atggggcccc gcaagcgct cgtggcggtt cttctgtga tggtagggc cgtggcgctg ctatcaacg cactgtgtgt gctttgtgc gcttcaagcg ctgagctccg cactcagcc tcaaggctcc tctgtgtgaa tctgtctcgg gggcaacctgc tgcgtgggc gctgtgacatg ccttcaagc tgcgtgtgt gtagcgcgcg cgtgaacaccgt cggcgccggc cgcaltgcaa gtcatgtgtt tctgtgacac cttcttgccg tccaacgccc cgtcgaagcgt ggcgcgcgtg agcgcagacc agtggctggc agtggcgctc ccactgcgt acgcggagac cctggcgacc cgtatggcg gctgtgtgt gggctgtggc tggggacagt cgtgtgctt ctacgtgcgt gactgtgtt gctcgtgggt tggctacag agcgctcgt cgtcgtgt gctgtgctg ccggccagagc ctgagcgctc ggccttgcca gcttccacg ccacgttcca tgcgtgggc ttggtgtgc cgtgtggcgt gctgtgctc accctgctcc aggtgacacg ggtggcagac agacatgac agcagatgga caccgtcac atgaaggcg</p>	A	Homo sapiens

555	189873	G Protein- Coupled Receptor GPR78	CAC34041.1	<p>tcgccgtgct cggcgacctg caccocagtg tgcggcacagg ctgcctcatic cagcagaagc ggccgccgcca ccgcgccacc  aggaaagtg gcatgctat tgcgaactc ctaictgct ttgccccgta tgcatagacc aggcctggcgg agctcgtgoc  cttcgtacc gigaacgcc agtggggagcat cctcagcaag tgcctgaact acagcaaggc gggtggccgac ccgttcacgt  actcttct cggccggccg ttccgccaaag tctggccagg catgggtcac cggcttctga agagaacccc gcgccagca  tcacccatg acagtctct ggatgggoc ggcatgggic accagctgct gaagagaacc ccgcggccag cgtccacca  caacgctct ggagacacag agaatgatic ctgcctggcag cagacact ga  MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSAEIRTRA SGVLLVNL SL  GHLLAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL  SADQWLAVGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGY S  SAFASCSRL PPEPERPFA AFTATLHAVG FVLPLAVLCL TSLQVHRVAR  RHCQRMDTVT MKALALLADL HPSVRQRCL QKRRRRHRAT RKIGIAIATF  LICFAPYVMT RLAEVFPVT VNAQWGILSK CLTYSKAVAD PFTYSLLRP  FRQLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS  VDTENDSCLQ QTH</p>	P	Homo sapiens
556	189874	Neuromedin U Receptor 2	NM_020167	<p>atggaaaaa ttcaaatgc ttcttgatc taccagcaga aactagaaga tcaattcag aaacacctga acagcaccga  ggagiatcig gcttctct gggaacctcg gcgcagccac ttctctcc ccgtgtctg gggtatgig ccaatttgg tggggggg  cattggcaat gtctgggtg gcttgggtat tctgcagcac caggctatga agacgccac caactactac ctctcagcc  tggcggctc tgaactctg gtctgtctc ttggaaagcc cctggaggtc tatgagatgt ggcgcaacta cctttctg  ttcggcccg tggcgtgta ctcaagacg gccctcttg agaccgttg ctgcctcc atctcagca tcaaccgt  cagcgtggag cgtactggg ccatctaca cccgtccgc gccaaatgc agagacacccg gcgcggggcc ctcaggatcc  tcggcatgt cggggcttc tccgtgctct tctcccgcc caacaccagc atccatggca tcaagtcca ctactccc  aalgggtccc tggccagg ttggccacc tgaaggctca tcaagccat ggagatcac aattatca tcaaggctac ctctctta  ttctacct tcccagac tgcatacgt gtctctact acctcagc actcagcaga aagaagaca aatcttga ggcatgaa  gggaatcaa atattcaag acctgcaga aaatcagta acaagatgt gtgtgtgt gtctatgt ttgtatcgt ttggccccc  ttccattg accgactct ctccagctt ggaggaggat ggagtgatc cctggcgtgt ggttcaacc tctccatgt tgggtcaggt  gtcttct acctgagtc agctgcaac ccattatc ataacctact gtctgccc ttccaggcag cattocagaa tgtatctct  tcttocaca aacagtgga ctccagcat gaccacagt tgcacctgc ccagcgggaac atctctga cagaatgoca  cttgggag ctgaccgaag alataggcc ccaattcca tgcagtcat caatgcaca ctctacct ccaacagccc  tcttagta acagatga agaaact atcaagcti ccaatgaac azaactga  MEKLQNASWI YQKLEDPFQ KHLNSTEYL AFLCGPRRSH FFLPVSVVYV  PIFVVGIGN VLVCLVILQH QAMKTPTNY LFLAVSDLL VLLGMPLEV  YEMWRNYPFL FGPVGCYFKT ALFETVCFAS ILSTTVSVE RYVAILHPFR  AKLQSTRRA LRILGVWGF SVLFLPNTS IHGKFHYFP NGSLVPGSAT  CTVIKPMWY NFIIQVTSFL FYLLPMTVIS VLYYLMALRL KKDKSLEADE  GNANIQRPCR KSVNKMFLVL VLVFAICWAP FHIDRLFFSF VEEWSESAA  VFNLVHVVSF VFFYLSSAVN PIYNLLSRR FQAAFQNVIS SFHKQWHSQH  DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNSHL PTALSSEQMS  RTNYQSFHN KT</p>	A	Homo sapiens
557	189874	Neuromedin U Receptor 2	NP_064552.1	<p>atgtggcag ctgccttgc agacttaac tccagcaga tgaatgtgc cttgtcac ctccattg ccgagaggta cctgcctct  gattccagg actggagaac catcacccg gctcttgg tggctgtcgt cctgggggc ttctgggaa acctgtgtgt</p>	P	Homo sapiens
558	189884	G Protein- Coupled Receptor	LG94108		A	Homo sapiens

Ls189884

559 189884 G Protein- ENSMPRT1140 P Homo  
Coupled Receptor 67 sapiens  
Ls189884

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560 189895 G Protein- NM\_031936 A Homo  
Coupled Receptor sapiens  
GPR61

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561 189895 G Protein- NP\_114142.1 P Homo  
MESSPQQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFFML



565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	ggccaccgg gcacttgccc ccaagggaagc acggctcagc acgttggtgg gctgcaccac cticaggtag cggttgagtg cgatggctgt gaggaagaca acgtggccgg tgcgttggtt ggacagcagc aagaggttga ctttgcaggc agcagcccca aagcccgagg tctatggag gaggttagtag tccacgcgga gggcgagggt gctgacagag aggaagtcag cggccaccag gctgcaccag aacaccgtgt tggaggtcca gggccgcgtg tggagtcaga agatgaagag ggccaacctg tccccacca ggccaccagac aaactcagg gccaggatg gtgcagagaa ggacagacc agcaggaag aggtggggg gacggggccct ccaggagcc cccacacagt ggtaaggc MELHNLSSPS PSLSSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSSS LVSAFLAPIL P Homo ALEFVLGLVG NSLALFICI HTRPWTSTNV FLVSLVAADF LLISNPLRV sapiens DYVLLHETWR FGAAACKVNL FMLSTNRTAS VVELTAIALN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLLL STFGSPCLS YRVGTPKSAS LRWHQALYLL EFFLPLALIL FAIVSIGLTI RNRGLGGQAG QRAMRVLAM VVAVYTICFL PSIFGMSM VAFWLSACRS LDLCTQLFHG SLAFTYLSNV LDPVLYCFSS PNFLHQSRAL LGLTRGRQGP VSESSYQPS RQWRYREASR KAEAIKLV QGEVSLEKEG SSQK ggtaagggt taactcagca gaattgttg aacaactacg acalgctggg gatcagcca tggaaigcaa ctgcaaaaa A Homo ctggctggca gcagaggctg cctgggaaa gtiactacti tccatttiti atgggauga gttcgttg ggagtccttg gaaalaccat sapiens tgtgtttac ggtiactacti tctictgaa gaactiggaac agcagtaata ttatctcti taactctcti gctcigact tagctttct gtgcacccct cccatctga taaggagta tgcataigga aactggat atggagacti gctctgcata agcaacogat atgtcttca tgcacact talaccaga tttctttct cactttatc agcatagatc gatactgat aattagat cctttccgag aacacctt gcaaaagaaa gagtttgta tttaactc ctggccat tgggtttg taacttga gtiacttacc atacttccc ttataatcc tgtataact gacaalgca ccactgtaa tgaattgca agtctggag accccaacta caactcatt tacacatg gttaacact gtggggc ctattctc ttittgtat gttttcti tattaacaga tigtctcti cttaaagcag aggaataggc aggtgtctac tgtcttgccc ctgaaaagc ctctcaacti ggtaicagc gcagtggttaa tctctgti gcttttaca cctatcag tcalc-ggaa tgrgaggalc gcttcagccc tggggagtg gaaagcagat cagtgacac aggtcgtat caactctt tacattgta cagggctti ggctcttg aacagrica tcaacctgt cttctatt ctttggag alcatctcag ggacalgctg atgaatcac tgaacacaa cttcaalcc cttacatct ttagcagatg ggctcatgaa cttctacti catcagaga aagtgaggg gctgtgaaa cagattgtc tacagatga tctgtaagcc agtiacagt tgccttaact calagacalc aatcagagag tgrcagat ttaacctga tctaaagaca agtgiacc agagatgag aaaaagalg gcagacaaga algtactgti tttctcti aagaatgaa aggagtgaa ctgcctatg ttggcgatg taactcaaa atactagga gataagcti tttcaatca gtgcaaaaat ggaaalatata, taagaaca agtgtctgc attgatcac tggcagat gtaaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGLGNTIV VYGYIFSLKN P Homo WNSSNYLFL NSVSDLAFLC TLPMLIRSYA NGNWTYGDVL CISNRYVLHA sapiens NLYTSILFLT FISIDRYLII KYPFREHLLQ KKEFALLISL AIWVLVTLEL LPILPLNPV ITDNGTICND FASSGDPNLYN LYISMCLTLL GFLIPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FTYHVVMNV RIASRLGSWK QYQCTQVVIN SFYIVTRPLA FLNSVINPVF YELLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg cctctgggc tcttcggg gcgcgcgcgc gctgccttc gcttgaggca aaagactct tgtggaagt A Homo ggaaactatt gicatttc cagaatgat tccaagccc alcaalgga cctgacttg ctgtcttg tgaatgct tgaagaact sapiens ctgcatctct gcttgact tcatctiac tgaaccatg gctctcgg cagtgtgac tgcgttccat accgggacat ccaacacac
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	ggtaagggt taactcagca gaattgttg aacaactacg acalgctggg gatcagcca tggaaigcaa ctgcaaaaa ctggctggca gcagaggctg cctgggaaa gtiactacti tccatttiti atgggauga gttcgttg ggagtccttg gaaalaccat tgtgtttac ggtiactacti tctictgaa gaactiggaac agcagtaata ttatctcti taactctcti gctcigact tagctttct gtgcacccct cccatctga taaggagta tgcataigga aactggat atggagacti gctctgcata agcaacogat atgtcttca tgcacact talaccaga tttctttct cactttatc agcatagatc gatactgat aattagat cctttccgag aacacctt gcaaaagaaa gagtttgta tttaactc ctggccat tgggtttg taacttga gtiacttacc atacttccc ttataatcc tgtataact gacaalgca ccactgtaa tgaattgca agtctggag accccaacta caactcatt tacacatg gttaacact gtggggc ctattctc ttittgtat gttttcti tattaacaga tigtctcti cttaaagcag aggaataggc aggtgtctac tgtcttgccc ctgaaaagc ctctcaacti ggtaicagc gcagtggttaa tctctgti gcttttaca cctatcag tcalc-ggaa tgrgaggalc gcttcagccc tggggagtg gaaagcagat cagtgacac aggtcgtat caactctt tacattgta cagggctti ggctcttg aacagrica tcaacctgt cttctatt ctttggag alcatctcag ggacalgctg atgaatcac tgaacacaa cttcaalcc cttacatct ttagcagatg ggctcatgaa cttctacti catcagaga aagtgaggg gctgtgaaa cagattgtc tacagatga tctgtaagcc agtiacagt tgccttaact calagacalc aatcagagag tgrcagat ttaacctga tctaaagaca agtgiacc agagatgag aaaaagalg gcagacaaga algtactgti tttctcti aagaatgaa aggagtgaa ctgcctatg ttggcgatg taactcaaa atactagga gataagcti tttcaatca gtgcaaaaat ggaaalatata, taagaaca agtgtctgc attgatcac tggcagat gtaaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGLGNTIV VYGYIFSLKN P Homo WNSSNYLFL NSVSDLAFLC TLPMLIRSYA NGNWTYGDVL CISNRYVLHA sapiens NLYTSILFLT FISIDRYLII KYPFREHLLQ KKEFALLISL AIWVLVTLEL LPILPLNPV ITDNGTICND FASSGDPNLYN LYISMCLTLL GFLIPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FTYHVVMNV RIASRLGSWK QYQCTQVVIN SFYIVTRPLA FLNSVINPVF YELLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg cctctgggc tcttcggg gcgcgcgcgc gctgccttc gcttgaggca aaagactct tgtggaagt A Homo ggaaactatt gicatttc cagaatgat tccaagccc alcaalgga cctgacttg ctgtcttg tgaatgct tgaagaact sapiens ctgcatctct gcttgact tcatctiac tgaaccatg gctctcgg cagtgtgac tgcgttccat accgggacat ccaacacac
567	189904	Purinergic Receptor P2U2 (GPR91)	NP_149039.1	ggtaagggt taactcagca gaattgttg aacaactacg acalgctggg gatcagcca tggaaigcaa ctgcaaaaa ctggctggca gcagaggctg cctgggaaa gtiactacti tccatttiti atgggauga gttcgttg ggagtccttg gaaalaccat tgtgtttac ggtiactacti tctictgaa gaactiggaac agcagtaata ttatctcti taactctcti gctcigact tagctttct gtgcacccct cccatctga taaggagta tgcataigga aactggat atggagacti gctctgcata agcaacogat atgtcttca tgcacact talaccaga tttctttct cactttatc agcatagatc gatactgat aattagat cctttccgag aacacctt gcaaaagaaa gagtttgta tttaactc ctggccat tgggtttg taacttga gtiacttacc atacttccc ttataatcc tgtataact gacaalgca ccactgtaa tgaattgca agtctggag accccaacta caactcatt tacacatg gttaacact gtggggc ctattctc ttittgtat gttttcti tattaacaga tigtctcti cttaaagcag aggaataggc aggtgtctac tgtcttgccc ctgaaaagc ctctcaacti ggtaicagc gcagtggttaa tctctgti gcttttaca cctatcag tcalc-ggaa tgrgaggalc gcttcagccc tggggagtg gaaagcagat cagtgacac aggtcgtat caactctt tacattgta cagggctti ggctcttg aacagrica tcaacctgt cttctatt ctttggag alcatctcag ggacalgctg atgaatcac tgaacacaa cttcaalcc cttacatct ttagcagatg ggctcatgaa cttctacti catcagaga aagtgaggg gctgtgaaa cagattgtc tacagatga tctgtaagcc agtiacagt tgccttaact calagacalc aatcagagag tgrcagat ttaacctga tctaaagaca agtgiacc agagatgag aaaaagalg gcagacaaga algtactgti tttctcti aagaatgaa aggagtgaa ctgcctatg ttggcgatg taactcaaa atactagga gataagcti tttcaatca gtgcaaaaat ggaaalatata, taagaaca agtgtctgc attgatcac tggcagat gtaaaaaaa aaaaaaaa MAWNATCKNW LAEEAALEKY YLSIFYGIEF VVGLGNTIV VYGYIFSLKN P Homo WNSSNYLFL NSVSDLAFLC TLPMLIRSYA NGNWTYGDVL CISNRYVLHA sapiens NLYTSILFLT FISIDRYLII KYPFREHLLQ KKEFALLISL AIWVLVTLEL LPILPLNPV ITDNGTICND FASSGDPNLYN LYISMCLTLL GFLIPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVIFSVL FTYHVVMNV RIASRLGSWK QYQCTQVVIN SFYIVTRPLA FLNSVINPVF YELLGDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK tggagcatg cctctgggc tcttcggg gcgcgcgcgc gctgccttc gcttgaggca aaagactct tgtggaagt A Homo ggaaactatt gicatttc cagaatgat tccaagccc alcaalgga cctgacttg ctgtcttg tgaatgct tgaagaact sapiens ctgcatctct gcttgact tcatctiac tgaaccatg gctctcgg cagtgtgac tgcgttccat accgggacat ccaacacac
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beta)	<p>atttgctg tgagaaaca cctacatgaa lattacac cctccaccat tccagcalcc tgcacctcagt ccatgctta gatatagtt tgaaccatg gctccactg gtttgatg ctgacccg agatagacag ctggtccac aacaccagca gcaatlaaga gctaaact gctcttcag atccacct ctgtataat gatattcat ctgtttgt ctctttgg gaacttgg gttgcccica tggttacca aaaaagctgcc algaggctg caatlaacat cctctggc agcctagct tgcagacat gttcttgca gtcctgaaca tgccttgc cctgttaact attctacta cccgatggat ttugggaaa ttctctgta tgggtatcgc tatgtttt tggttattg tgatagaag agtagccatc ctgtcalca ttacataga taggttctt attatggcc agaggcagga taagctaaac ccatatagag ctgaagttct gatgcagt tcttggcaa ctcttttg ttagctttt cctttagccg taggaaaccc cgcctgcag atacctcc gactccoca gtgtgtgt tgggtacaa ccaatccagg ctaccagg ttatgtatt tgaattct catcttct ttcalacct tcttggaat actgtacta ttatgggca tactaacac cctggccag atgctctga ggtatccatag ctaccctgaa ggtatagcc tgaagccaggc cagcaaacgt ggtctcalga gtctgcagag accittccag atgagcattg acatgggct taaaacacgt gcttcacca ctattgat tctttgt gcttcattg tctgtgggc cccattccac acttacagcc ttgtggcaac attcgtatg cactttact atcagcaca ctttttgag attagcact ggtctatg gctctgtac ctcaagctg catgaaacc gctgtctac tactggaga ttagaat ccatgact tgcctggaca tgaatgctaa gctctcaag ttttggccg agctccctgg tcacacaaag cgaaggatg gctctatg tcttgggac atcggagct ggttgaata ttggagctg ctgacatt ttgttgatg tgggtatg ctgacatt ggttgact tgcattat tgcattgaa ttcttct catagctct ccaattat ttittata ggtttgtgt atgtatgt gtgagcagtg taaagaaaga alggttaata tgcctgtt accaagaata aataatagga aagtgtatc aaataaac tccaggctc aatagaatc ccaattag ggtgagaga ctittttg gtttgggt ttctctga ttgattgt ttcalagtg ggaacagga ttgtgctta ttgagctgc agttacattg aattgaggt gttctgtg ctgtaagggt atgtattt gatttata agacttt ttcttgaa gacactgt cttttacat ccaattgag cc</p>	<p>569 189920 G Protein-Coupled Receptor GPR63 (PSP24 beta)</p>	<p>NP_110411.1</p>	<p>P Homo sapiens</p>	<p>MVPSAVLTAF HTGTSNTTFV VYENTYMNIT LPPFQHPDL SPLLRYSFET MAPTGLSST VNSTAVPTTP AAFKSLNPL QITLSAMIF ILFVSFLGNL VVCLMVYQKA AMRSAINLL ASLAFADMLL AVLNMFPALV TILTRWFQ KFFCRVSAMF FWLFVIEGVA ILIISIDRF LIIVQRQDKL NPYRAKVLIA VSWATSFCVA FPLAVGNPDL QPSRAPQCV FGYYTNPGYQ AYVILISLIS FPFVLVLY SFGILNLR HNALRIHSYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILLF AVFVWCWAPF ITTYSLVATFS KHYYQHNF EISTWLLWLC YLKSALNPLI YYWRKKFHD ACLDMMPKSF KFLPQLPGHT KRRIRPSAVY VCGEHRTVV</p>
G Protein-Coupled Receptor Dj287g14.2	<p>tgtctgagt catctctga agcttaaaa acaattgag aattggctt caagatagac ctataatgca catcacatg gaattataa actcggaaact tggctctcag cgtatcc cgtttaccag ggaacaaagc aattcaaat tttagcatg gcttccaaag caataatgaa tctgtatcc agatggatt ttgagagtgga caagtggaac cactggcact tgaatttt cctccaaact tacttgagaa tttagtcca gaaatctg ttatagtag aagagcacag ttacttct tcaacaaaac tggactttc caggatgtag gaccccaag aaaaacttta gttgatttg tgaatggcag cagttatgga aacattacta tccagaatct gaaatgact gttcaataaa aatacaaca tacaagaact caggagtg alcatccat ctgtgcttc tgggactga acaaaaaca aagtttggga ggttggaca cgtcaggatg tgtgtcacac agagattcag algcaagtgga gacagctgc ctgtgttaacc actcacaca ctgtggagt ctgatggacc ttccaagaag tgcctcacag ttatgtgcaa gaaacactaa agtccctact ttcatcagct atattggggt tggataatct gctattttt cagcagcaac tctctgaca tatgtgtct ttgagaatt gccaaggag tatccctca aacttctgat gaaacctgag acagccctgc tgttcttga tctctcttc cctctagag gctggaatc cctctcaat gttggaatggtac ttgtcatg tgttgagtc ctgttgcat tctctctt ggaacatt accctggatg ggtctagagc aattcacatg tactatgctc tagttaaagt atttaaacat tactatgoc gatacatct aaaaatcgc atcattggct ggggtttggc tgcctagtg gtgtcagtg ttctagcag cagaacaac aatgaagct alggttaagg aagttatggg aagaagaag gtgatgaat ctgttggt caagatccag tcalattta tgtgacctgt</p>	<p>570 189945 G Protein-Coupled Receptor Dj287g14.2</p>	<p>AK027843</p>	<p>A Homo sapiens</p>	<p>tgtctgagt catctctga agcttaaaa acaattgag aattggctt caagatagac ctataatgca catcacatg gaattataa actcggaaact tggctctcag cgtatcc cgtttaccag ggaacaaagc aattcaaat tttagcatg gcttccaaag caataatgaa tctgtatcc agatggatt ttgagagtgga caagtggaac cactggcact tgaatttt cctccaaact tacttgagaa tttagtcca gaaatctg ttatagtag aagagcacag ttacttct tcaacaaaac tggactttc caggatgtag gaccccaag aaaaacttta gttgatttg tgaatggcag cagttatgga aacattacta tccagaatct gaaatgact gttcaataaa aatacaaca tacaagaact caggagtg alcatccat ctgtgcttc tgggactga acaaaaaca aagtttggga ggttggaca cgtcaggatg tgtgtcacac agagattcag algcaagtgga gacagctgc ctgtgttaacc actcacaca ctgtggagt ctgatggacc ttccaagaag tgcctcacag ttatgtgcaa gaaacactaa agtccctact ttcatcagct atattggggt tggataatct gctattttt cagcagcaac tctctgaca tatgtgtct ttgagaatt gccaaggag tatccctca aacttctgat gaaacctgag acagccctgc tgttcttga tctctcttc cctctagag gctggaatc cctctcaat gttggaatggtac ttgtcatg tgttgagtc ctgttgcat tctctctt ggaacatt accctggatg ggtctagagc aattcacatg tactatgctc tagttaaagt atttaaacat tactatgoc gatacatct aaaaatcgc atcattggct ggggtttggc tgcctagtg gtgtcagtg ttctagcag cagaacaac aatgaagct alggttaagg aagttatggg aagaagaag gtgatgaat ctgttggt caagatccag tcalattta tgtgacctgt</p>

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WITSFNVDGL CIAVAVLLHF FLAFTTWG LEAHMYIAL VKVFNTYIR  
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IFYVTCAGYF GVMFFLNAM FIVVMVQICG RNGKRSNRTL REEVLRNLS  
VVSLLTLLGM TWGFAFFAWG PLNPFMYLF SIFNSLQGLF IFIFHCAMKE  
NVQKQWRRHL CCGRFLADN SDWSKTATNI IKKSSDNLGK SLSSSIGSN  
STYLTSSKS SSTTYFKRNS HTDNVSYEHS FNKSGSLRQC FHGQVL VKTG PC  
caccatagg caaagatagt tctctagag agaatcgc ctgcaata caggtgtacc aggcagatg gtagacaatc  
agatttga tacttatt atgcagtgac atacatgct atctgtgag caggtctcat aggggaatata ttgacctgt gggattcta  
tggtaatg aaagaacaa aacgagctgt galattatg ataaactag ccattgtgca cttaacaa gttcttct tggcctgag  
gactctac tactgaatc atgactggcc atttgggct ggtctgca tgttctgtt ctactgaag tatgtcaaca tgtatgcaag  
calctact ttgtctgca tcaagtgtg acgaattgg ttctcagt acctcttgc ctctacatg tgcacaaga aalagacct  
gtacatcagc atgtctggt ggcctgcatc ctgcttgc tgttactt ttccactct cagaaccagt gatgatact ctggcaatag  
gaccaaatgc ttgtgtgac ttctaccag gaatgcaac ctggccagct ccgtgtat gatgacatt ggcaggttga ttgggttgt

571	189945	G Protein- Coupled Receptor Dj287g14.2	BAB55406	P	Homo sapiens
572	190026	G Protein- Coupled Receptor JEG18	NM_032553	A	Homo sapiens

573	190026	G Protein- Coupled Receptor JEG18	NP_115942.1	MPANYTCTRP DGDNTDFRYF IYAVTYTVIL VPGLIGNILA LWVFGYMKKE TKRAVIFMIN LAIADLLQVL SLPLRIFYYL NHDWPFQPL CMFCFYLKYV NMYASIFYLV CISVRRFWFL MYPRFHDCK QKYDLYTISIA GWLJCLACV LFPLRLTSD TSGNRTKCFV DLPTNRVNLA QSVVMMTIGE LIGFVTPLLI VLYCTWKTVL SLQDKYPMAQ DLGEKQKALK MILTCAGVFL ICFAPYHFSF PLDFLVKSNE KSCLARRVI LIFHSVALCL ASLNSCLDPV IYFSTNEFR RRLSRQDLHD SIQLHAKSFV SNHTASTMTP ELC	P	Homo sapiens
574	190031	G Protein- Coupled Receptor VLGR1	AF055084	attactglat atglatglat tcaocgiga ttoccaaagg tcaattat gacagcaict tictgattc ctacagttt attactoc callgoccaa gtttgaac ttatattg ttggcttc gtacaggcac cactcattgg gagcaacaca gaaacttgt tcaaacalc atttcaggaa aagaagaala tttagcgtt gaggaacttt aaaagtattg cagtaattia tagaactaag tigtaggagc taaggagc tttaaitca tgcatagcaa ttatglat ttgtgttg ttgtattta ttatattg atttattga ctgttgaaaga gggatgatt ttacaltca agaaatlgga ctacagtag ataacctcc tgaataggga aacatcca ttgttgcac cataatattg aaaaatgata acgcagaagg calcatigaa ttgaccaa agtatatgc ctgcgaagtg gaggaagatg ttggcctgat calgatccca gtgtgtaggc tacaagaaac ttatggctat gtgacagctg atttcaict tcaaggctcc tctggcagtc ccggagggtg tgaattcat ttgcattgca gtacagtcac ctctcagcat ggagcaaaact taagtattat aaatatctcc atcatigatg acaatgaaag tgaattgag gagccattg aaatttact cactggagct acggaggagc cggctctgg ggccacctta gtgagcagaa tcaataatg taaggatgac tctoccttg gattataag gtttccat caaagcaaaa ttctattgc taatoccat tccacaatga ttatcact ggctctggag cggactggag gactctggag agagattcag gtgactggag agacagtagg acccaactct caagaagcct tactgccaca gaataagagc attgcagacc cagtgaagcgg gtgttctat ttggagagag gagaagagag agtgaagac ataattctga caaltatcc taltgaagaa atggaagtgt aagaagacat caattataa cttaacttg tgaagagaga agtaaat gactocagag ctaaaagatg tacaataacc atacaagatg ttgtgaccc aaatgtgatt gtltcagttg ctctgaaac ttgtctaaag aagaactatt cagagcctct ggctctggaa ggagccctgc tcaattact ctgttcaga agatgcaagg gcaaccttgg agagattatg gtttactggg aataagtag tgaattgac attactgaag actttttc caccagtgga ttmtacca ttgcgtgag agagatigaa gctagcttg algtcattt gctacagat gagggtacttg agatagagga agattatg atccagcttg ttcttga ggagagagcc gaactggagc tggagagag laccatgg ttctgttt algtcaatga tgaaccat ggagatttg occtgtatc ggatgcagca tcaaltat tgggcaaaa ccttattga tccatcaaa taacataaac ccggctgtgt ggaacattg gagatgtggc tgttgggctt cgaatatcat cggatcataa agaaagagcc atgtttaccg aaatgtcaga gaggcagc gtgtgcaag atgtgtgccc atataagtg gacgtgtgtg caataagaa tcaaggcttc ctatcagtg gcttaatt cacttgcaa ctgtgagc tgaatgtgt cggtagac ttctatgaa tggcaaat tcttcaagaa tggcaaatc gctgcttc agtctgag aaagctgcca atttcaagt cggattgaa tccatgtt ttcaactat gaaactact gcttgacaaa ggcacgttat gattttag agagacat atggagct ctgggtgccc tggagacctg gatagtccc tgggttagaa attcctgaat tcaatgtgt tggcaacatg accacaacac tgggagagct ttactttc caggtgagc aagagaaagg agttttctg tggagcttc ctggccctgg	A	Homo sapiens

[illegible]

575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	<p>ggaggactac acatggccta cagacacttc tggaltgtgg ttcttttgt catttcaac agctgcagg gactttatgt ttatcaggtt tatttcaitt tacacaacca aatgtgtgc cctatgaagg ccaagtacac tctggaatag aatgggcaac cttggaccag cacagccttt ttacagcccg ggagtggaat gcctcttgt ggaggggaaa tcaagaagc caccagaat cttacgttg ctatggagga ggggccacct gactgggaga gagcatcctt ccaacagggc agtcaggcca gccctgattt aaagccaagt ccacaaaatg gagccacgtt cccgtcctt ggaggatag gccaggggtc actgatagcc gatgaggagt cccaggagt tcatgattta aatgtgcat taaaactgg tctgtgtc agtgcagtg aatgaatc tggtaagg accgaagg accgaagg ggggacactt gactgactcc cagatgtgg agctcaggag galaccatc gccgacac accgttagca cctcataac cattcgactg agcacactt catatttga tcagtttg tgcataact cttcaagat accacctgt gtaataggaa cctgtgaatt gtactggatg attaalacaa acgtgatgt tgaattgga gataaattt ctgatgtat gtagcctgaa aattcacgc tataagaaag gtagagtcag tttgtatcag ttaataggat gttcatatc caaggatatt agttgtttt ttaatcatcc tataaggcta acatgttta atgaagtaa taatcaataa agcaatagaa tct</p> <p>MQLCIFCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI P Homo IEFDPKYTAF EVEEDVGLIM IPVVRHLGTY GYVTADFSIQ SSSASPGGVD sapiens YILHGSTVTF QHQQNLFIN ISIDDNESE FEEPIELLT GATGGAVLGR HL VSRILAK SDSPFGVIRF LNQKISIAN PNSTMILSLV LERTGGLLGE IQNVWETVGP NSQEALLPQN RDIADPVSLG FYFGEGERG RIIILTYPH EEIEVEETFI IKLHL VKGEA KLDSRAKDVLT LTQEFQDPN GVVQFAPETL SKKTYSEPLA LEGPLLTFF VRRVKGTFGE IMVYWELSS EFDITEDFLST SGFFTIADGE SEASFDVHLL PDEVPEIEED YVIQLVSVEG GAELDLEKSI TWFSVYANDD PHGVFALYSD RQSILIGQNL IRSIQINIR LAGTFGDVAV GLRISSDHKE QPIVTENAER QL VVKDGATY KVDVVPIKNQ VFLSGSNFT LQLVTVMVL VG GRFYGMPTIL QEAKSAVLVP SEKAANSQVG FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFIVVG NMPTLGSLS FSHGEQRKGV FLWTFPPGW PEAFLVHLSG VQSSAPGGAQ LRSGFIVAEI EPMGVFQFST SSRNIIVSED TOMRLHVQR LFGFHSDLIK VSYQTTAGSA KPLEDFEPVQ NGELFFQKFQ TEVDFEITII NDQLSEIEF FYINLTSVEI RGLQKFDVNW SPRLNDFS V AVTILDND LAGMDISFPE TTVAVA VDTT LPVETEST YLSTSKITTI LQPTNVVAIV TEATGVSAIP EKL VTLHGTP AVSEKPDVAT VTANVSIHGT FSLGPSIVYI EEMKNGTFN TAEVLIRRTG GFTGNVSITV KTFGERCAQM EPNALPFRGI YGISNLTWAV EEDFEEQTL TLIFLDGERE RKVSVQILDD DEPEGQEFFY VFLTNPQGA QIVEGKDDTG FAFAMVIT GSDLHNGIIG FSEESQSGLE LREGA VMRL HLIVTRQPNR AFEDVKVFWR VTLNKTVVVL QKDGVLNMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPQ VEVYFFVELY EATAGAAINN SARFAQIKL ESDSQSLVY FSVGSRLA VA HKKATLISLQ VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE PGQRSTVLDV ILTPETGSLN SFFKRFQIVL FDPKGGARID KVYGTANITL VSDADSQAIW GLADQLHQPV NDDILNRVLH TISMKVATEN TDEQLSAMMH LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRKDTRGF SHFAEVTEFN AFSLL TNVTC GSPGEKSKI LDSCPVLISL ALHWYPQQIN GHKFEKGEKD YRIPERLLD VQDAEIMAGK STCKLVQFTE YSSQQWFISG NNLPTLKNKV LSLSVKQSS QLLTNDNEVL YRIYAAEPRI IPQTSCLLW NQAAASWLSD SQFCKVIEET</p>
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576	190168	G Protein- Coupled Receptor GPR58	NM_014626	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VILKGIYHQS MSQIYGLIHG DLCPNPVYA ALFTAALVPL TCLVVVFVVF IHAYQVKPW KAYDDVFRGR TNAAEIPLJL YLFALISVTW LWGGLHMYR HFWMVLVFLVI FNSLQGLYVF MYYFILHNQM CPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGSJL IADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGILT DSQIVELRRI PIADTHL atgtaiccat ttatggcagg acataatic atcaaatat tiggcaalc tggcatgata attccatt cctacticaa gcagctcac acaccaacca acitccat cctccatg gccatcatg attctctt gggaticacc atagccat atagatgat cagatcggtg ggagaactgt ggatitgg gctacatt tgaagatt attatgtt tgaactgat citagcataa catccattt tcatcttgc tcagtgcca ttgatagatt ttatgata tttatccat tacttatic caccataa actattccag tcaataaag attgctact ctatgtgt cggctccctgg agcatggc ttcggggcg tctctcaga ggctatgca gatggaatag agggctatga catcttgtt gcttttcca gtcttgccc agtgaigt acaagctat gggggaccac ctgtttatg gcagtttct tcatcttgg gtctatgat gggggattt acggcaaaat ttgtcagta tccagaaaac atgtcatgc calcaataac tiggagaaa atcaaatata tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtgatag ggttttctt attatgtt ttcttgtt tcttcaat ttatgttat ccttttga acttctac tctctagt ttgttgat cttgacatg gtttgctat ttaactcca catgtaacc gttaataat ggtttctt atccctgt ttgcagagca ctgaagata ttgttagg taaatttc agctcatgt tccataatc tatgtgt algcaaaaag aagtgatga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLLSM AITDFLGFT IMPYSMIRSV P ENCWYFGLTF CKIYVSFDM LSTISIFHL SVADRFAI CYPILYSTKI TIPVKRLLL LCWSVPGAF FGAVFSEYA DGIEGYDILV ACSSCPVMF NKLLWGTLFM AGFTPGSMM VGIYKIFAV SRKHAHANN LRENQNNQVK KDKKAAKTIG IVIGVELLW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE algatctaa ctatatic cgaagacta tccagtgc caaatgtt aaataagat ctgtctccc accaacgtt ctttcatgt ccagtgata atgtatcgt ttatgactgg agcatgatt accactatt cggaaactg gtataatgg tticatatc gcattcaaa cagcttcat ctcacaaa cttctgact cttccatgg caaccagga cttctgtg ggttttga ttatgcata cagcataatg cgatcgtgg agatgtctg gtacttggg gattgcttt gtaattcca caaagctt gacatgac tcaagctgac ctccatttc cacctgtt ccatgctat tgaactgt ttatgctgt gtaacactt acattacaca accaaaatga cgaactcac cataaagcaa ctgtggcat ttgtgtgtc agttctgtt ctttttt ttgtttatg tctatctg gcagattgt coggtatgca gagtataag atactgtg ctgtctcaa ttctgtcc ctacttca acaaatctg ggggacataa ttgtcacta catgttct taccttggc tccatcattg ttgtattia tggcaaaatc ttatgttt ccaaacagca tgtctgagtc atcagccatg tgcctgaaaa cacaaaagggg gcagtgaata aacactatc caagaaaaag gacagggaag cagcgaagac actggacata ttgtcacta catgttct taccttggc ttgtgtgt cctgtttc ttgtgtct gattgaccca taccagact actccactcc cataactata ttgtatcti tagtgggt ccgtacttc aactctact gcaacctct taitcgtgc ttmtaalc calgtttca gaaagcattc aagttacatag tgtcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcacti aa MDLTYIPEDL SSCPKFVNKI LSHQPLFSC PGDNVFGYDW SHDYPLFGNL P VIMVSISHFK QLHSPNTFLI LSMATTDLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
577	190168	G Protein- Coupled Receptor GPR58	NP_055441.1	MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLLSM AITDFLGFT IMPYSMIRSV P ENCWYFGLTF CKIYVSFDM LSTISIFHL SVADRFAI CYPILYSTKI TIPVKRLLL LCWSVPGAF FGAVFSEYA DGIEGYDILV ACSSCPVMF NKLLWGTLFM AGFTPGSMM VGIYKIFAV SRKHAHANN LRENQNNQVK KDKKAAKTIG IVIGVELLW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE algatctaa ctatatic cgaagacta tccagtgc caaatgtt aaataagat ctgtctccc accaacgtt ctttcatgt ccagtgata atgtatcgt ttatgactgg agcatgatt accactatt cggaaactg gtataatgg tticatatc gcattcaaa cagcttcat ctcacaaa cttctgact cttccatgg caaccagga cttctgtg ggttttga ttatgcata cagcataatg cgatcgtgg agatgtctg gtacttggg gattgcttt gtaattcca caaagctt gacatgac tcaagctgac ctccatttc cacctgtt ccatgctat tgaactgt ttatgctgt gtaacactt acattacaca accaaaatga cgaactcac cataaagcaa ctgtggcat ttgtgtgtc agttctgtt ctttttt ttgtttatg tctatctg gcagattgt coggtatgca gagtataag atactgtg ctgtctcaa ttctgtcc ctacttca acaaatctg ggggacataa ttgtcacta catgttct taccttggc tccatcattg ttgtattia tggcaaaatc ttatgttt ccaaacagca tgtctgagtc atcagccatg tgcctgaaaa cacaaaagggg gcagtgaata aacactatc caagaaaaag gacagggaag cagcgaagac actggacata ttgtcacta catgttct taccttggc ttgtgtgt cctgtttc ttgtgtct gattgaccca taccagact actccactcc cataactata ttgtatcti tagtgggt ccgtacttc aactctact gcaacctct taitcgtgc ttmtaalc calgtttca gaaagcattc aagttacatag tgtcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcacti aa MDLTYIPEDL SSCPKFVNKI LSHQPLFSC PGDNVFGYDW SHDYPLFGNL P VIMVSISHFK QLHSPNTFLI LSMATTDLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
578	190170	G Protein- Coupled Receptor GPR57	NM_014627	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VILKGIYHQS MSQIYGLIHG DLCPNPVYA ALFTAALVPL TCLVVVFVVF IHAYQVKPW KAYDDVFRGR TNAAEIPLJL YLFALISVTW LWGGLHMYR HFWMVLVFLVI FNSLQGLYVF MYYFILHNQM CPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGSJL IADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGILT DSQIVELRRI PIADTHL atgtaiccat ttatggcagg acataatic atcaaatat tiggcaalc tggcatgata attccatt cctacticaa gcagctcac acaccaacca acitccat cctccatg gccatcatg attctctt gggaticacc atagccat atagatgat cagatcggtg ggagaactgt ggatitgg gctacatt tgaagatt attatgtt tgaactgat citagcataa catccattt tcatcttgc tcagtgcca ttgatagatt ttatgata tttatccat tacttatic caccataa actattccag tcaataaag attgctact ctatgtgt cggctccctgg agcatggc ttcggggcg tctctcaga ggctatgca gatggaatag agggctatga catcttgtt gcttttcca gtcttgccc agtgaigt acaagctat gggggaccac ctgtttatg gcagtttct tcatcttgg gtctatgat gggggattt acggcaaaat ttgtcagta tccagaaaac atgtcatgc calcaataac tiggagaaa atcaaatata tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtgatag ggttttctt attatgtt ttcttgtt tcttcaat ttatgttat ccttttga acttctac tctctagt ttgttgat cttgacatg gtttgctat ttaactcca catgtaacc gttaataat ggtttctt atccctgt ttgcagagca ctgaagata ttgttagg taaatttc agctcatgt tccataatc tatgtgt algcaaaaag aagtgatga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLLSM AITDFLGFT IMPYSMIRSV P ENCWYFGLTF CKIYVSFDM LSTISIFHL SVADRFAI CYPILYSTKI TIPVKRLLL LCWSVPGAF FGAVFSEYA DGIEGYDILV ACSSCPVMF NKLLWGTLFM AGFTPGSMM VGIYKIFAV SRKHAHANN LRENQNNQVK KDKKAAKTIG IVIGVELLW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE algatctaa ctatatic cgaagacta tccagtgc caaatgtt aaataagat ctgtctccc accaacgtt ctttcatgt ccagtgata atgtatcgt ttatgactgg agcatgatt accactatt cggaaactg gtataatgg tticatatc gcattcaaa cagcttcat ctcacaaa cttctgact cttccatgg caaccagga cttctgtg ggttttga ttatgcata cagcataatg cgatcgtgg agatgtctg gtacttggg gattgcttt gtaattcca caaagctt gacatgac tcaagctgac ctccatttc cacctgtt ccatgctat tgaactgt ttatgctgt gtaacactt acattacaca accaaaatga cgaactcac cataaagcaa ctgtggcat ttgtgtgtc agttctgtt ctttttt ttgtttatg tctatctg gcagattgt coggtatgca gagtataag atactgtg ctgtctcaa ttctgtcc ctacttca acaaatctg ggggacataa ttgtcacta catgttct taccttggc tccatcattg ttgtattia tggcaaaatc ttatgttt ccaaacagca tgtctgagtc atcagccatg tgcctgaaaa cacaaaagggg gcagtgaata aacactatc caagaaaaag gacagggaag cagcgaagac actggacata ttgtcacta catgttct taccttggc ttgtgtgt cctgtttc ttgtgtct gattgaccca taccagact actccactcc cataactata ttgtatcti tagtgggt ccgtacttc aactctact gcaacctct taitcgtgc ttmtaalc calgtttca gaaagcattc aagttacatag tgtcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcacti aa MDLTYIPEDL SSCPKFVNKI LSHQPLFSC PGDNVFGYDW SHDYPLFGNL P VIMVSISHFK QLHSPNTFLI LSMATTDLL GFVIMPYSIM RSVESCWYFG	Homo sapiens
579	190170	G Protein- Coupled Receptor	NP_055442.1	ADYVEACASH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VILKGIYHQS MSQIYGLIHG DLCPNPVYA ALFTAALVPL TCLVVVFVVF IHAYQVKPW KAYDDVFRGR TNAAEIPLJL YLFALISVTW LWGGLHMYR HFWMVLVFLVI FNSLQGLYVF MYYFILHNQM CPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGSJL IADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGILT DSQIVELRRI PIADTHL atgtaiccat ttatggcagg acataatic atcaaatat tiggcaalc tggcatgata attccatt cctacticaa gcagctcac acaccaacca acitccat cctccatg gccatcatg attctctt gggaticacc atagccat atagatgat cagatcggtg ggagaactgt ggatitgg gctacatt tgaagatt attatgtt tgaactgat citagcataa catccattt tcatcttgc tcagtgcca ttgatagatt ttatgata tttatccat tacttatic caccataa actattccag tcaataaag attgctact ctatgtgt cggctccctgg agcatggc ttcggggcg tctctcaga ggctatgca gatggaatag agggctatga catcttgtt gcttttcca gtcttgccc agtgaigt acaagctat gggggaccac ctgtttatg gcagtttct tcatcttgg gtctatgat gggggattt acggcaaaat ttgtcagta tccagaaaac atgtcatgc calcaataac tiggagaaa atcaaatata tcaagtgaag aaagacaaaa aagctgcca aactttagga atagtgatag ggttttctt attatgtt ttcttgtt tcttcaat ttatgttat ccttttga acttctac tctctagt ttgttgat cttgacatg gtttgctat ttaactcca catgtaacc gttaataat ggtttctt atccctgt ttgcagagca ctgaagata ttgttagg taaatttc agctcatgt tccataatc tatgtgt algcaaaaag aagtgatga g MYSFMAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLLSM AITDFLGFT IMPYSMIRSV P ENCWYFGLTF CKIYVSFDM LSTISIFHL SVADRFAI CYPILYSTKI TIPVKRLLL LCWSVPGAF FGAVFSEYA DGIEGYDILV ACSSCPVMF NKLLWGTLFM AGFTPGSMM VGIYKIFAV SRKHAHANN LRENQNNQVK KDKKAAKTIG IVIGVELLW FPCFFTLDD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRA LKYILLGKIF SSCFHNTILC MQKESE algatctaa ctatatic cgaagacta tccagtgc caaatgtt aaataagat ctgtctccc accaacgtt ctttcatgt ccagtgata atgtatcgt ttatgactgg agcatgatt accactatt cggaaactg gtataatgg tticatatc gcattcaaa cagcttcat ctcacaaa cttctgact cttccatgg caaccagga cttctgtg ggttttga ttatgcata cagcataatg cgatcgtgg agatgtctg gtacttggg gattgcttt gtaattcca caaagctt gacatgac tcaagctgac ctccatttc cacctgtt ccatgctat tgaactgt ttatgctgt gtaacactt acattacaca accaaaatga cgaactcac cataaagcaa ctgtggcat ttgtgtgtc agttctgtt ctttttt ttgtttatg tctatctg gcagattgt coggtatgca gagtataag atactgtg ctgtctcaa ttctgtcc ctacttca acaaatctg ggggacataa ttgtcacta catgttct taccttggc tccatcattg ttgtattia tggcaaaatc ttatgttt ccaaacagca tgtctgagtc atcagccatg tgcctgaaaa cacaaaagggg gcagtgaata aacactatc caagaaaaag gacagggaag cagcgaagac actggacata ttgtcacta catgttct taccttggc ttgtgtgt cctgtttc ttgtgtct gattgaccca taccagact actccactcc cataactata ttgtatcti tagtgggt ccgtacttc aactctact gcaacctct taitcgtgc ttmtaalc calgtttca gaaagcattc aagttacatag tgtcaggaaa aatattagc tccattcag aaactgcaaa ttgttct gaagcacti aa MDLTYIPEDL SSCPKFVNKI LSHQPLFSC PGDNVFGYDW SHDYPLFGNL P VIMVSISHFK QLHSPNTFLI LSMATTDLL GFVIMPYSIM RSVESCWYFG	Homo sapiens

GPR57

580

190188 G Protein- AB049405  
Coupled Receptor  
LGR6

DGfCKfHTSF DMMLRLTSIF HLCSIAIDRF YAVCYPLHYT TKMTNSTIKQ  
LLAFcWSVPA LfSfGLVLSE ADVSGMQSYK ILVACFNfCA LfTNKFwGTI  
LfTTCFFTPG SIMVGfYKf FfVSKQHARV fSHVPENTKG AVKHLKSKK  
DRKAAKTLGI VMGVFLACWL PCFLAVLIDP YLDYSTfPILf LDLfVWLRYf  
NSTCNPLfHG FFNPWFQKAF KYfVSGKfFS SHSETANLFP EAH  
gccaifgca ggaagacggc atcatgctgt cfigccgagctg cctfigagctc gggctgtccg ccgcttccgggg ggaacctggac  
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aaactccaca cactatctt gtagtgggtg cc alggaacatcc agggagtttcc agatctaaa ggcaaccacaa gctgggaagat  
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tgggcagtgg gaggctggaa gacctcaact tgaatggag gtagcttcaa aaggggcccc gggtctctt tcaaggcttc  
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gaaaccttt gggtgaacccc aaacctcat gggtgggaagaa ctgtgtctga gggtcagctt agtccagga gtaggtggag  
gcttggaggg gggtgggggg tttaggggtt cttggcttgg cactttag caaggttaga tatcccccc catttctt tccccctc

A Homo  
sapiens

581	190188	G Protein- Coupled Receptor LGR6	AAG17168.1	<p>tttcttttcc tctctccccc tccggtgaaagc alggtcgtctt ctataacaaa tacaacacaa acicagcagc gtagatcata gcaggatggc ccagtaccgc gctocactga tcaactctct cctgtgacca tacaacagg ggtcctcttg gcttggcttt ccttggctt tctcagctt caccttgata ctgggctctt tcttgatc gctgaagct gtegaacaga gacttgact ttgtctgct taagggaat gagagaaga aagacagta aggggtggag ggttgatca</p> <p>MRLEGEGRSA RAGQNLSRAG SARRGAPRDL SMNNLTELQP GLFHHLRFL ELRLSGNHLSPHPQAFSGLYSLKILMLQN NQLGGIPAEA LWELPSLQSL DLNYNKLQEF PVAIRTLGRL QELGFHNNNIKAPEKAFMG NPLLQTHFY DNPIQFVGRS AFQYLPKLHT LSLNGAMDIQ EFPDLKGTTS LEILTLTRAG IRLLPSGMCQ QLPRLRVLEL SHNQIEELPS LHRCKLEEI GLQHNRIWEI GADTFSQLSS LQALDLSWNA IRSHPAFLS TLHSLVKLDL TDNQLTTLPL AGLGGLMHLK LKGNLALSQA FSKDSFPKLR ILEVPIAYQC CPYGMCSFF KASGQWEAED LHLDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP GPFKCEYLF ESWGIRLAVW AIVLLSVLCN GLVLLTVFAG GPVPLPVKF VVGAIAGANT LTGSCGLLA SVDALTFQGF SEYGARWETG LGCRTATGFLA VLGSEASVLL LTLAAVQCSV SVSCVRAVYK SPSLGSVRAG VLGCLALAGL AAALPLASVG EYGASPLCLP YAPPEGQPAALGFTVALVMM NSFCFLVVG AYKLYCDLP RGDFAVWDC AMVRHVAWLI FADGLLYCPV AFLSFASMLG LFPVPEAVK SVLLVVLPL ACLNPLLYLL FNPFRDDLRLRLPRAGDSG PLAYAAAGEL EKSSCDSTQA L VAFSDVDLI LEASEAGRPP GLETYGFPSV TLISCCQPGA PRLEGSHCPE PEGNHFGNPQ PSMDGELLRL AEGSTPAGGG LSGGGGFQPS GLALLHTY</p>	P	Homo sapiens
582	190414	G Protein-coupled Receptor GPR101	AF411115	<p>atgacgtcca cctgacacaa cagcagcgc gagagtaaca gacagcacac gtagcagcc cttccaata tcccatcag cctggcccaa ggcatcact gctcaaacgt gctggtaic ttctcgccg cctcttctt cggcaacata ggtctggcgc taggttgcca ggcgaagccg cagctctgc aggtgaccaac cgttttacc tttaacctc tegtacccga cctgtctgag atttcgctgc tggcccccgc ggtggggcc accctctgc cttctctgc gcccctcaac agccactct gcacggccct ggtagccctt accaccctt tggcttgc cagcgtcaac accattgctc ggtgtcagc ggtatcgctac ttgtccatca tccacctct ctctatccc tcaagatga cccagcgcgc cggttacctc cttctatg gcaactggat tgtggccatc ctgcagagca ctctccact ctacggctgg ggcagggctg ccttgatga ggcgaatgct cttctctca tgaictgggg ggcagcccc agctacacta ttctagcgt ggtgtcttc atgtcalt cactgaatg catgaatg cttactccg tgggtcttc tgcagccccg aggcagcagc cttctctga caatgcaag agacacagct tggaaagtc agtcaaggac tgtgtggaga atgagccagg aggaggagca agagaaagg agtagttcca agtagagat aggtttcgc gccaagatga aggtgaggtc aagggccaaagg agggtcagaaat agaaagcaag agcggcagcc tgaaggccaa agaaagagc accggggacca gtagagatag tgaaggcc aggggcagc agtaggtcag agtagagc accggggcca gtagggcca gtagggcag catggagggt aaggaagga gcaacaagt tgaaggagac agtagaagg cagacaagg tgcacagag gtaacaagt gcaagatga ctgggtgaa gtagacatgg agtttggga agacacalc aattcagc agtagagct cgaaggcagc aacatccgg agagcttccc acccagctgt cgtaacaga acagcaaac tctctgccc aggtgtcacc agtgcnaagc tgcataagc atctatca tcatcttc ctatgtgta tcccggggc cctactgct tttagcagc ctggccggtt ggggtggat cgaacccag gtaaccagt ggggtgatcac cataalcac tggctttct tctgagc ctgcatcac cctatgct atggctatct gcaacagc ataaagg aaatccagga catgctgaag aggtctctt gcaagggaag gcccocgaaa gaagatagc acccagact gcccgaaca gagggtggga ctgaaggcaa gattgtcc tctacagt ctgacttt tcttga</p>	A	Homo sapiens



583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	<p>MTSTCTNSTR ESNSHTCMP LSKMPSLAH GIIRSTVL VI FLAASFVGN I VLALVLQRKP P</p> <p>QLLQVTRNFI ENLLVTDLLQ ISL VAPWVVA TSVPLFWPLN SHFCTALVSL</p> <p>THLFAFASVN TIVLVSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI</p> <p>LQSTPPLYGW QQAADFERNALCSMIWGASP SYTILSVVSF IVIPLIVMIA</p> <p>CYSVVFCAAR RQHALLYNVK RSHLEVRVKD CVENEDEEGA EKKEEFQDES</p> <p>EFRRQHEGEV KAKEGRMEAK DGSLLAKEGS TGTSESSVEA RGSEEVRESS</p> <p>TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQSIDLGE DGMEFGEDDI</p> <p>NFSEDDVEAV NIPESLPPSR RNSNSNPPLP RCYQCKAAK VIFIHSYVL SLQPYCFLAV</p> <p>LAVWVDVETQ VPQWVITHI WLFLLQCCIH PYVYGYMHKT KKEIQDMLK</p> <p>KFFCKEPPK EDSDPDLPGT EGGTEGKIVP SYDSATFP</p> <p>taactgtcca ccagaaagga cgtctcttg ggtgagtga acitctcca ttatagaag aattgaaagg tgaagaaact agcctctalc</p> <p>atgtggaaca gctctgacgc caactctcc tcttaccatg agctgtgct gggctatcgt taigtgtcag taagtgggg</p> <p>gggtgggtg gctgtgacag gcaaccgtgg caatgtgct accctacagg ccttggccat ccagccaag ctcgtaccc</p> <p>gattcaacct gctcalagcc aaotcacac tggctgalt ccttactgc acgtctctc agccctctc tgggacacc taactccacc</p> <p>tgcactggcg caccgtggcc acctcttga gggtaatttg gctctctt ttgcctcca atctgtctc catctgacc cttgtctca</p> <p>ctgggtgagca ccgggtgtt gggcgtggcc agctttgct cccttggcc taattalc cttgtacctg taigtgtcac ctgcagctt</p> <p>gaccgcatcc gagccggccc ttaccacc atctcatgg gcatctact tgtgtctgg ctcagcagtg tggcatcti ctattgctc</p> <p>atccacgcc aggtcaaacg agcagcacag gcatgtggacc aatacaagt gcgcagagca agcatccact ccaacatgt</p> <p>ggccaaggact gatgaggcca tgcctgtctg ttccaaggag ctggaagca ggttaagcalt aggaagacc agtgaaggga</p> <p>tttacttga gccagtcagt cctgtccacca ccaggaacct ggaaggggag tcaatcaag tgggagacca gatcaacagc</p> <p>aagagagctia agcagatagc agagaagaag cctccagaag caicgtccaa agccagacca ataaaggag ccagaaagc</p> <p>tccgattct tcatgggaat ttgggaaggt gactgaaigt tgtttctg tgttctctg cttgtctg agctacatcc ccttctgt</p> <p>gctcaacat ctggatgcca gatgtcagg tcccggttg gtcacatgc tigtgtccaa cctcacctgg ctcaatggt</p> <p>gcatcaaccc tgtgtctat gcaagcatga accgccaat ccgccaagca taigtgtcca tttaaaag agggccccc</p> <p>agtttccala ggtctcaita gaactgtgac octagtcacc apaattcagg actgtctct ccaggaacca agtggocagg</p> <p>taalaggaga ataggtagaa taacacatgt gggcatcttc acaacatct ctcccagcc tcccaatca agtctctcca tcaattgac</p> <p>aatgtttcag ccttagacgt ccaaggagt attatzaat attatzaat gaattcttg ctttaaaaa aaaaaaata aaaaaagaaa</p> <p>aaaaaaaaa aaaaaaaa aaaaa</p>	Homo sapiens
584	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NM_020370	<p>MWNSSDANFS CYHESVLGYR YVAVSWGIVV AVTGTGVNVL TLLALAIQPK P</p> <p>LRTFNLLIA NLTLADLLYC TLLQPFSDVT YLHLHWRTGA TFCRVFGLL</p> <p>FASNSVILT LCIALGRYL LIAHPKLPQ VFSAGGIVLA LVSTWVVGVA SFAPLWPIYI</p> <p>LVPVCTCSF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ</p> <p>ALDQYKLRQA SIHNSHVART DEAMPGRFQE LDSRLASGP SEGISSEPV</p> <p>AATTQILEGD SSEVGQDQNS KRAKQMAEKS PPEASAKAQ IKGARRAPDS</p> <p>SSEFGKVTM CFAVFLCFAL SYTFLLLNI LDARVQAPRV VHMLAANLTW</p> <p>LNGCINPVLY AAMNRQFRQA YGSILKRGR SFHRLH</p> <p>ctttgtcca gagctaaacc agttttct ctctccacag caaatctt gacagtgtac atctctccc agctgtggc aagaagacag</p> <p>aagctctct acaactatct ctggacact gctgtgcgc acatctgt cctcttttct atagtgttg tggactct gttggaagt</p> <p>ttcatctga acatgcaagt gctcagagtc ccagacaaga tcatagaagt gctggaattc tcatcatcc acactctcat atggattact</p>	Homo sapiens
585	190418	Inflammation- Related G Protein-Coupled Receptor EX33	NP_065103.1	<p>LNGCINPVLY AAMNRQFRQA YGSILKRGR SFHRLH</p> <p>ctttgtcca gagctaaacc agttttct ctctccacag caaatctt gacagtgtac atctctccc agctgtggc aagaagacag</p> <p>aagctctct acaactatct ctggacact gctgtgcgc acatctgt cctcttttct atagtgttg tggactct gttggaagt</p> <p>ttcatctga acatgcaagt gctcagagtc ccagacaaga tcatagaagt gctggaattc tcatcatcc acactctcat atggattact</p>	Homo sapiens
586	190419	G Protein- Coupled Receptor Ls190419	AJ303165	<p>LNGCINPVLY AAMNRQFRQA YGSILKRGR SFHRLH</p> <p>ctttgtcca gagctaaacc agttttct ctctccacag caaatctt gacagtgtac atctctccc agctgtggc aagaagacag</p> <p>aagctctct acaactatct ctggacact gctgtgcgc acatctgt cctcttttct atagtgttg tggactct gttggaagt</p> <p>ttcatctga acatgcaagt gctcagagtc ccagacaaga tcatagaagt gctggaattc tcatcatcc acactctcat atggattact</p>	Homo sapiens

587	190419	G Protein- Coupled Receptor Ls190419	CAC33085.1	LCFRKAPVELSTANILTVIILSQLVARRQKSSYNLLALAAADILVLEFIVFVDFLLED FILNMQMPQV PDKIEVLEF SSHTSIWIT VPLTIDRYA VCHPLKYHTV SYPARTRKVI VSVYITCFLT SIPYYWPNWPNWTEYISTSV HHVLIWHCF TVYLVPCSF FILNSIIVYK LRRKSNFRLR GYSTGKTTALFTITSIFAT LWAPRIMIL YHL YGAPIQN RWLVHMSDI ANMLALLNTA INFLYCFIS KRFRIT	P	Homo sapiens
588	190427	Cysteiny/ Leukotriene CYSLT2 Receptor	NM_020377	aaagtctcta agttgaagc gtaagctga accaacaaca taaagtgcta tctacatc aaaaatcagg aaatttraat ttatataga atgaatgca gcatgtagta aagactaac cagtggttta aaactcaact tcaaaagaaa agatagatatt gctccctgtt tcaataaac ctagaagagat gtaacagta agcaagaagg aaaaaggaggaa altcacaaaag taacttttg tctctgttc tttaaccc agcatggaga gaaaatttat gtccttgcaa ccaatcaatc ccgtatcaga aatgggaacca aatgggaacct tcaagcaataa caacagcagg aaatgcacaa tgaanaact caagagagaa ttutoccaa tigtatatt gataatatt tctggggag tcttggggaaa tgggtgtcc atatagttt tcttgagcc ttaagagag tccacatctg tgaacgttt catgtctaat ctggccattt cagatctct gtcataagc acgtctccct tcaaggctga ctattatt agaggtctca attgatalatt tggagacctg gcttgacagg ttaigtctia ttctgttat gtcaacatgt acagcagatt ttatttctg accgtgtctga gttgtgtg tttctgtg accgtgtgacc cccttgctt tctgcatg accagatca ggaagctgt gattctctgt gggatcatat gtaactctat catgtctct tcaataatgc tctggagacag tggctctgag cagaacggca gttgcacatc atgtatagag ctgaatctat ataaaatg taaagctgacg accatgtaact atattgctt gggtgtgggg tgcctgtctg cattnicac actcagcatc tgtatctgc tgaatctg ggtctgtta aaggtggagg tccagaatc gggtgtgtgg gttctcaca ggaaggacct gaccacatc altcaact tgaatctt ctctgtgt tttctgacct altcacact gaaggacct cacttgacga caggaaggt ggggttatgc aaagacagac tgcataagc ttgtgtatc acatggctt tggcagcagc caatgctgc ttaacttc tctctatta ctgtgtgg gaaatttta aggacagact aaagctgtga ctcagaanaag gccatccaca gaagggcaag acaaggtgtg tttccctgt aggtgtgtgg tgaagaaagg aaacagagat ataaggaagt ctatagag acctgtctt gtaactgt gtccalcit altacatc agtctccaaa tgaacttga ttacalcac tccacaaca tttgtattc taatatag ttgaccatta ctgtgttaa taaagacct tcaaaaatt ttatcagtg tattticagt tgttagtgtc taaagaggaa taaatcccta ctatagctct gttgggtctga altacagact ggggaanaa gcaaaagcaca ttgtatccta cttnitca gatatgaac cagatctctg gccatcagg ctcttaaat tctcaaaag agccacaact tcccagctt ctccagctcc cctgtctct tcaatccctt gataatagc aactaaagc gctacttgaa gccocagagc agaaaaggaa cacatctaa gattcagggaa aagactaact gtaaaaagc aggtgtctt ataacaaagc agcatcaagt cccaagtaag gacagtgaag gaaaaggggg agaaaggatg gtagcaaaaaga gaacttgccaa taagttagggg aggggaagaa ttcatgtg attgggaag aggtttac acactgaag caacctatt tctactgt ctctgtgc aggtgtatag gaagggacag aaaagttag gggagatctg gggcatgccc ctatgaatg aagaattgt gtaataag gaaagggggat catcaaggac atgtatccta aatttttt gaaagtcag ttattgtacc ttgtgtcagt tctcttccc attaatcat tgggtatgaa gccaaaata aaaagggtgc ctctgaagat taggtgtg cactcaaggg aaagatggag tagagggcaca atagcaaaag ttgtgtcact cctgaatc tattaacatt tccgcagaag atgaataggg agatgtccc ttccctttg agataggtga gaaaacact agataggtg aggggttct tctgtccat tgaacaagg ctataggtat taccactac taccactac accatgtac tgaacaact tgaatcagt	A	Homo sapiens

589	190427	Cysteiny/Leukotriene CYSLT2 Receptor	NP_065110.1	<p>ctccctgcag ggcaagattat gccaggcact ttacattgt tgaatccat accaagctc tgagttccat ttacagctg aagaattga agcttagaga aatiaagaag ctgtttiaag ttacacagc tagtaagagt ttiaaaaatc tctgfcaga agtgttggct ggtgtctc cccaccacta cccitgaaa cttocaggaa gattgttga aagcttgaat aaaagctgc cttctacc aattctcc cctctcac tctacaaga aaaccaaag ttctctca gattgttga ccalagatc agtaaaaggt ggaagtgata tggcattctg aaagttagga gggactaagt cagctgcat actaac</p> <p>MERKFMISLQP SISVSEMEPN GTFSNNNSRN CTIENFKREF FPIVYLIIFF WGVLGNGLSI P</p> <p>YVFLQPYKKS TSVNVFMLNL AISDLLFIST LPPRADYYLR GSNWIFGDLA</p> <p>CRIMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLHVT SIRS AWILGSG IIWILMASS</p> <p>IMLLDSGSEQ NGSVTSCLLEL NLYKIAKLQT MNYIALVVGCLLPFFTLISIC YLLIIRVLLK</p> <p>VEVPESGLRV SHRKALTTI ILIIFFLCF LPYHTLRVTH LTTWKVGLCK DRJHKALVT</p> <p>LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQAKT KCVFPVSVWL RKETRV</p> <p>ccctgtggcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccaagagcac caggagctcg aatggggaac gattctgca gctacgagta tggggattac agcgactct cggaccgcc tgggactcg cttggctggc cctgtctggc catgaccg cttggcgtgg cccgcctcc actgtatgcc gccatttcc tgggtgggggt gcccgggcaat gccatgggtg cctgggtggc tgggaaggtg gccggccgga ggggtgggtg cactgtgtg cttcacctgg cgtggcggga ttgtctgtg tgtgtctc tggccatct ggcaagtcgcc atggccgtg gaggccactg gcctgtatgtt gcagtgggtgt gttgggtggc gcccaccatc atctgtcga ccalgtatgc cagctgtctg cttctggcag cttcactg cggacctctg ttctgtctc tggggcctgc ctgggtgt acgggtcagc gggtgtgtcgg ggtgtcaggtg gccgtgtgggg cagcctggac actggcctg cttctcaag tggccctgc calctacgcc cggctgcacc agggagcact ccaagccgg cttgcaggtg tgggtggacta cggggctcc tccagcaccg agaatgggt gactgcat cggttttt ttggcttct gggggccctg gttggccgtg ccaagtga cagtgccctc ctgtgtggg cagcccgag cttggccagc ccatgtgtt ggggttttt gttctggg cacciaoca cctgtgtggg ctgtgtctca ctgtgtggc cccggactc gcatctctgg ccaaggccct ggggggtga cccctcatg tgggcttgc cctgtctac agctgtccta atccatgt cttctgtat ttgggtggg ctaactcg ccgtgtactg ccagctgtct gttactgggc cttggggg tccagggg agggagaaag tgggtgacag aagaatoca ccagccatga cttgtgtcgg gaggtaggg tggagctgg agagacattg tgggtgtgta tctctatc tcatctaca agactggctt caggcalagc tgggtaccag agtctaatga tgtctcat ttatctct cttactca cagatatoca tcatctact gtaigtga aggccttt aggcactga gataagcag tgaacaaac agacacaaat cctggcc</p> <p>MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV</p> <p>PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPL AVPIARGGHW</p> <p>PYGA VGCRL PSIILLTMYA SVLLLAALSA DLCFLALGPA WWSTVQRACG</p> <p>VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV</p> <p>TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH</p> <p>LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPMFL FLYFGRAQLR</p> <p>RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV</p> <p>atgtctgggc ctgtctgt gggccctcag cttgtggctc tctgcaccc tgggaggggg gcccattgt gctgtcaca gcaactagg atgaaggggg actactgtct gggggggctg ttcccctgg ggcagggccga ggaagctggc cttgcagcc gggacagggc cagcagccct gttgtcaca ggtacagagg tgggacggcc tgggtcgggg tcaagggtgac caggtctggg gttctctga gttggggccg aggtggccat ctgtgtgtct gttgtggccc aggttctct caaacggct gttctgggca ctggccatga aaatggccgt ggaaggaatc aacaaaggt cggatctgt cccgtgggtg cgtctgggt actgacctt tgalactg cggaggtg tgggtggcat gaaagccagc ccatgttcc tggccaaaggc aggcagccgc gacatggccg</p>	Homo sapiens
590	190437	G Protein-Coupled Receptor C5L2	NM_018485	<p>ccctgtggcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccaagagcac caggagctcg aatggggaac gattctgca gctacgagta tggggattac agcgactct cggaccgcc tgggactcg cttggctggc cctgtctggc catgaccg cttggcgtgg cccgcctcc actgtatgcc gccatttcc tgggtgggggt gcccgggcaat gccatgggtg cctgggtggc tgggaaggtg gccggccgga ggggtgggtg cactgtgtg cttcacctgg cgtggcggga ttgtctgtg tgtgtctc tggccatct ggcaagtcgcc atggccgtg gaggccactg gcctgtatgtt gcagtgggtgt gttgggtggc gcccaccatc atctgtcga ccalgtatgc cagctgtctg cttctggcag cttcactg cggacctctg ttctgtctc tggggcctgc ctgggtgt acgggtcagc gggtgtgtcgg ggtgtcaggtg gccgtgtgggg cagcctggac actggcctg cttctcaag tggccctgc calctacgcc cggctgcacc agggagcact ccaagccgg cttgcaggtg tgggtggacta cggggctcc tccagcaccg agaatgggt gactgcat cggttttt ttggcttct gggggccctg gttggccgtg ccaagtga cagtgccctc ctgtgtggg cagcccgag cttggccagc ccatgtgtt ggggttttt gttctggg cacciaoca cctgtgtggg ctgtgtctca ctgtgtggc cccggactc gcatctctgg ccaaggccct ggggggtga cccctcatg tgggcttgc cctgtctac agctgtccta atccatgt cttctgtat ttgggtggg ctaactcg ccgtgtactg ccagctgtct gttactgggc cttggggg tccagggg agggagaaag tgggtgacag aagaatoca ccagccatga cttgtgtcgg gaggtaggg tggagctgg agagacattg tgggtgtgta tctctatc tcatctaca agactggctt caggcalagc tgggtaccag agtctaatga tgtctcat ttatctct cttactca cagatatoca tcatctact gtaigtga aggccttt aggcactga gataagcag tgaacaaac agacacaaat cctggcc</p> <p>MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV</p> <p>PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPL AVPIARGGHW</p> <p>PYGA VGCRL PSIILLTMYA SVLLLAALSA DLCFLALGPA WWSTVQRACG</p> <p>VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV</p> <p>TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH</p> <p>LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPMFL FLYFGRAQLR</p> <p>RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV</p> <p>atgtctgggc ctgtctgt gggccctcag cttgtggctc tctgcaccc tgggaggggg gcccattgt gctgtcaca gcaactagg atgaaggggg actactgtct gggggggctg ttcccctgg ggcagggccga ggaagctggc cttgcagcc gggacagggc cagcagccct gttgtcaca ggtacagagg tgggacggcc tgggtcgggg tcaagggtgac caggtctggg gttctctga gttggggccg aggtggccat ctgtgtgtct gttgtggccc aggttctct caaacggct gttctgggca ctggccatga aaatggccgt ggaaggaatc aacaaaggt cggatctgt cccgtgggtg cgtctgggt actgacctt tgalactg cggaggtg tgggtggcat gaaagccagc ccatgttcc tggccaaaggc aggcagccgc gacatggccg</p>	Homo sapiens
591	190437	G Protein-Coupled Receptor C5L2	NP_060955.1	<p>ccctgtggcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccaagagcac caggagctcg aatggggaac gattctgca gctacgagta tggggattac agcgactct cggaccgcc tgggactcg cttggctggc cctgtctggc catgaccg cttggcgtgg cccgcctcc actgtatgcc gccatttcc tgggtgggggt gcccgggcaat gccatgggtg cctgggtggc tgggaaggtg gccggccgga ggggtgggtg cactgtgtg cttcacctgg cgtggcggga ttgtctgtg tgtgtctc tggccatct ggcaagtcgcc atggccgtg gaggccactg gcctgtatgtt gcagtgggtgt gttgggtggc gcccaccatc atctgtcga ccalgtatgc cagctgtctg cttctggcag cttcactg cggacctctg ttctgtctc tggggcctgc ctgggtgt acgggtcagc gggtgtgtcgg ggtgtcaggtg gccgtgtgggg cagcctggac actggcctg cttctcaag tggccctgc calctacgcc cggctgcacc agggagcact ccaagccgg cttgcaggtg tgggtggacta cggggctcc tccagcaccg agaatgggt gactgcat cggttttt ttggcttct gggggccctg gttggccgtg ccaagtga cagtgccctc ctgtgtggg cagcccgag cttggccagc ccatgtgtt ggggttttt gttctggg cacciaoca cctgtgtggg ctgtgtctca ctgtgtggc cccggactc gcatctctgg ccaaggccct ggggggtga cccctcatg tgggcttgc cctgtctac agctgtccta atccatgt cttctgtat ttgggtggg ctaactcg ccgtgtactg ccagctgtct gttactgggc cttggggg tccagggg agggagaaag tgggtgacag aagaatoca ccagccatga cttgtgtcgg gaggtaggg tggagctgg agagacattg tgggtgtgta tctctatc tcatctaca agactggctt caggcalagc tgggtaccag agtctaatga tgtctcat ttatctct cttactca cagatatoca tcatctact gtaigtga aggccttt aggcactga gataagcag tgaacaaac agacacaaat cctggcc</p> <p>MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV</p> <p>PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPL AVPIARGGHW</p> <p>PYGA VGCRL PSIILLTMYA SVLLLAALSA DLCFLALGPA WWSTVQRACG</p> <p>VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV</p> <p>TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH</p> <p>LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPMFL FLYFGRAQLR</p> <p>RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV</p> <p>atgtctgggc ctgtctgt gggccctcag cttgtggctc tctgcaccc tgggaggggg gcccattgt gctgtcaca gcaactagg atgaaggggg actactgtct gggggggctg ttcccctgg ggcagggccga ggaagctggc cttgcagcc gggacagggc cagcagccct gttgtcaca ggtacagagg tgggacggcc tgggtcgggg tcaagggtgac caggtctggg gttctctga gttggggccg aggtggccat ctgtgtgtct gttgtggccc aggttctct caaacggct gttctgggca ctggccatga aaatggccgt ggaaggaatc aacaaaggt cggatctgt cccgtgggtg cgtctgggt actgacctt tgalactg cggaggtg tgggtggcat gaaagccagc ccatgttcc tggccaaaggc aggcagccgc gacatggccg</p>	Homo sapiens
592	190438	G Protein-Coupled Receptor Ls190438	LG94114	<p>ccctgtggcc acgtgtcaga caaatctaa cttctcaagg actccaaaa ccaagagcac caggagctcg aatggggaac gattctgca gctacgagta tggggattac agcgactct cggaccgcc tgggactcg cttggctggc cctgtctggc catgaccg cttggcgtgg cccgcctcc actgtatgcc gccatttcc tgggtgggggt gcccgggcaat gccatgggtg cctgggtggc tgggaaggtg gccggccgga ggggtgggtg cactgtgtg cttcacctgg cgtggcggga ttgtctgtg tgtgtctc tggccatct ggcaagtcgcc atggccgtg gaggccactg gcctgtatgtt gcagtgggtgt gttgggtggc gcccaccatc atctgtcga ccalgtatgc cagctgtctg cttctggcag cttcactg cggacctctg ttctgtctc tggggcctgc ctgggtgt acgggtcagc gggtgtgtcgg ggtgtcaggtg gccgtgtgggg cagcctggac actggcctg cttctcaag tggccctgc calctacgcc cggctgcacc agggagcact ccaagccgg cttgcaggtg tgggtggacta cggggctcc tccagcaccg agaatgggt gactgcat cggttttt ttggcttct gggggccctg gttggccgtg ccaagtga cagtgccctc ctgtgtggg cagcccgag cttggccagc ccatgtgtt ggggttttt gttctggg cacciaoca cctgtgtggg ctgtgtctca ctgtgtggc cccggactc gcatctctgg ccaaggccct ggggggtga cccctcatg tgggcttgc cctgtctac agctgtccta atccatgt cttctgtat ttgggtggg ctaactcg ccgtgtactg ccagctgtct gttactgggc cttggggg tccagggg agggagaaag tgggtgacag aagaatoca ccagccatga cttgtgtcgg gaggtaggg tggagctgg agagacattg tgggtgtgta tctctatc tcatctaca agactggctt caggcalagc tgggtaccag agtctaatga tgtctcat ttatctct cttactca cagatatoca tcatctact gtaigtga aggccttt aggcactga gataagcag tgaacaaac agacacaaat cctggcc</p> <p>MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV</p> <p>PGNAMVAWVA GKVARRRVGA TWLLHLAVAD LLCCLSLPL AVPIARGGHW</p> <p>PYGA VGCRL PSIILLTMYA SVLLLAALSA DLCFLALGPA WWSTVQRACG</p> <p>VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV</p> <p>TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAIVV GFFVCWAPYH</p> <p>LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPMFL FLYFGRAQLR</p> <p>RSLPAAACHWA LRESQQDES VDSKKSTSHD LVSEMEV</p> <p>atgtctgggc ctgtctgt gggccctcag cttgtggctc tctgcaccc tgggaggggg gcccattgt gctgtcaca gcaactagg atgaaggggg actactgtct gggggggctg ttcccctgg ggcagggccga ggaagctggc cttgcagcc gggacagggc cagcagccct gttgtcaca ggtacagagg tgggacggcc tgggtcgggg tcaagggtgac caggtctggg gttctctga gttggggccg aggtggccat ctgtgtgtct gttgtggccc aggttctct caaacggct gttctgggca ctggccatga aaatggccgt ggaaggaatc aacaaaggt cggatctgt cccgtgggtg cgtctgggt actgacctt tgalactg cggaggtg tgggtggcat gaaagccagc ccatgttcc tggccaaaggc aggcagccgc gacatggccg</p>	Homo sapiens



594	190484	G Protein-Coupled Receptor Ls190484	LG95579	<p>AQDPVKPWQL LENMYNLTFH VGGLPLRFDS SGNVDMYDYL KLWVWQGSVP  RLHDVGRFNG SLRTERLKIR WHTSDNQVRP QACAQKPVSR CSRQCQEGQV  RRVKGFHSCC YDCVDCEAGS YRQNPDDIAC TFCGQDEWSP ERSTRCFRRR  SRFLAWGEPA VLLLLLLSL ALGLVLAALG LFVHHRDSPL VQASGGPLAC  FGLVCLGLVC LSVLLFPQP SPARCLAQOP LSHLPLTGCL STLFLQAAEI  FVESELPLSW ADRLSGCLRG PWAWLVVLLA MLVEVALCTW YLVAFPPEVV  TDWHMLPTEA LVHCRTRSWV SFGLAHATNA TLAFLCFLGT FLVRSQPGRY  NRARGLTFAM LAYFITWVSF VPLLANVQVV LRPVQMGMAL LLCVLGILAA  FHLPRCVLLM RQPGLNTPPEF F</p>	<p>ictgactggc tggcttctct gctcggcccg ggccttcca ctgctctggt gggccctgctg gttcttgagc cctcactggg gggccctggcc A  cggggccggc tctggccggg tgcctgctggg gctttctct tcaaggagcag gaggctggcg tgggtctcta agggccctcg  gggttagggag cagagtaggg gttggggag cttcaltaca gggactgggc acagactgg cagcagggcg aggggtctgg  acgttaggt ctgctgtgg ctggggccaca gaaactgact gttgctgggc cagtaggtic agctgtggct gggctgtggg  atccgactgt gggctggggc taggggttag ctgtggctgga gctgtgggat ccgaltcggg ctggaggtgt ggggttccct  gaggctgggc caacggatcc atctgtgact gggccctctgc catcgctct ggcagaggtg gaocctcaga atctagctgg  gtctgtggct cagtgggcggt gaagctggcc gggccgctct cgcagagagag tccgcggaag gacgagagca cgggagcgag  caggggtccgg aggtcggcac tggccatgag gcaaggagag gggctgaggg agctgttggg taggtatcagg tagctggagt  agaaagggc ctccagagc aggttagccag agtagagct ccaagggag gcccagggg gaggcccg caggtctggg gctgtgtg  ggcagctcca ggaaccata ggttgacaga atgttctgg ccacagggg gaggcccg caggtctggg gctgtgtg  gctgtgtgag gttcagacagg ctgtggctgg gtttagagag tggcagagga ggcagagga gaaagggcagg aagccccc  ggactccag catctcagc gacagctct cgtgttcca gaagtcca ggcagagga ggtgtgacca ccaagggcga  gctcggggga agaacaggcca gggcagctgt aaggtgtgtt ccagaccca gacacggcg cagagccagg ggggagggcg  gactggggg tggccagggt accaggtgtt gacagggcc agcagggcg ggtcggaggt gaggggcggg agcagggagga  ggccggagga gtaggagcag cccatagga agtagtaga agtagtaga agtagtaga agtagtaga agtagtaga  cggactcta ggtatctgga gggccgctgt ggcaggggaca agtagtaga agtagtaga agtagtaga agtagtaga  acgggtgcca gctccatgg gggctgggga gggccagc cagggccatc accatggg ctgagcagga gcaaggccag  ggggccacag gaagacgg tccagccac ctggggggta gtagtctcta tcatagct ctgtggggg cctgtggcca  gtggcacca ggtcagctc catgttaggt tcatgtgg gtcocagg tctgtgga cagggaggtt gttgtgtgt  aatcaatgat ggtgtgagat accgagtag gtagagagag gctgtgtcat ctccaggcca gtcacatcc ctccctggc  cattgtat accitttag taattatct atgcaagg ctgaggtt agtaggtt gtaggtt gtaggtt tacaatcac ttacag</p>	<p>Homo sapiens</p>
595	190484	G Protein-Coupled Receptor Ls190484	ENSMPT2619	<p>MEADLGATGH RPRTELDDED SYPQGGWDTV FLVALLLGL PANGLMAWLA  GSQARHGAGT RLALLLSLA LSDFLFLAAA AFQLEIRHG GHWPLGTAAC  RFYFLWGVY YSSGFLFLAA LSLDRCLLAL CPHWYTPGHRP VRLPLWVCAG  VWVLAFLSV PWLVFPEAV WWYDLVICLD FWDSEELSLR MLEVLLGGFLP  FLLLVCHVL TQATACRTCH RQQQPAACRG FARVARTILS AYVVLRLPYQ  LAQLYLAFV WDVYSGYLLW EALVYSDYLI LLNSCLSPFL CLMASADLRT  LLRSVLSFA AALCEERPGS FTPTPEQTQL DSEGTLPPEP MAEAQSQMDP  VAQPQVNPVL QPRSDPTAQ QLNPATAQPS DPTAQQLNL MAQPQSDSVA  QPQADTNVQT PAPAASSVPS PCDEASPTPS SHPTPGEALD PATPPASEGE SPSSTPPEAA  PGAGP</p>	<p>P</p>	<p>Homo sapiens</p>

596	190595	G Protein-Coupled Receptor SH120	NM_016334	<p>agcacctggg aaaaaggcaga cagtgtaggg ggggctgtgg cccagcgtg cgtggcctc ggggagtaggg aagtgagggc agggagcttc ctacacctc gccatgggt tctgtatga ctccagcacc atgattacct cccaaatact atttttga ttgggtggc ttctctcat ggcgcaatg tttaagact atgagatagc tcatgtatgt gtacaggtga tctctcgt gacgttga tttcttga ccatgttga gctcatcacc ttgaaatct taggagtaat gaaatagcagc tccgttat ttacatggaa aatgaacatg tgcgtaatic tgcgtatcct ggtttatg gttgctttt acatggctta ttatttgg agcaataacc gactactgca taacaacaga ctgctttt cctgtctt atgctgacc ttatgtat tctctggaa actaggagat cctttcca ttctcagccc aaaaacatggg atctatcca tagaacaagt catcacccgg gttgtgtga ttggagtga tctcatggct ctctttctg gattgtggc tgtcaactgc ccatactt acatgtctia ctctccaggg aatgtgactg acacagat atagccctg gaacggcgag tctgtcaaac catgtatag atcataagca aaaaagaaag gatggcaatg gcacggagaa caatgttcca gaagggggaa gtgcataaca aacatcagg ttctggggga atgataaaa gttttaccac ttacgcatca ggaagtga aa atctacct tatccaag gaagtgtgalt ctltggaaaga attagcagg cagctttttc tggaaacagc tgaatctat gctaacagg agaaataga atactcaaa accttcaagg ggaatatatt taattttt ggtttttt tctattia ctgtgtttg aaaaattca tggctaacat caaatgtt ttgatcgag ttgggaaac ggaatcctgc acaaggagca ttgagatcac tgggaatatt ctgggaalcc aattgtat gaaattttg tcccaacaca ttctctcat tctgttga ataatatog tcaatocat gagaaggatg ctgatcac ttacaaagt ctttatgoc atctatgca gtaagtctc caatgtcat gtctgtctat tagcacagat aatgggcalt tactttgt ctctgtgt gctgtatccga atgagtatgc cttagaala ccgcaccata atcactgaag tcttgggaa acitgacgtt aactttat accgtttgt ttatgtatc ttctgttca gctgtctc tagctatc ttctctatt tggctcaca acaggcaca gaaagcaca tggcacctg aactaaagc tactacagc tgttagggc cagtggtttc aaaaattaga tataagagg ggggaaaaatg gaacaggggc ctgacattt ataaacaaac aaaaatgctat ggttagctatt ttacactca tagcalact ctccocctc aggtgact atgacatga gtagcatcag ccaagacatg agaggagaa ctacatcaag acatactca gacagtagca tccgtgtgg atagtaggt ct gttgttaggg cggagagagg ocaagaaact aaaggtgaa aatacacctg aactctggg caagacatgt ctatgttagc tgaagcaaac acgtagatg tccgtttaa ggtttacag gaaaggta tagctttg ttgagtga ctatgaa tcaagagact t MSFLDSSIM ITSQILFFGF GWLFMRQLF KDYEIRQYV VQVFSVTF AF SCTMFELIIF P</p>	<p>Homo sapiens</p>
597	190595	G Protein-Coupled Receptor SH120	NP_057418.1	<p>EILGVLN SSS RYFHWKMNLC VILLVFMV PFYGVFVS NIRLLHKQRL LFSCLLWLTF MYFWKLGDP FPILSPKHGI L SIEQLISRV GVIGVTLMAL LSGFGAVNCP YTYMSYFLRN VDTDILALE RRLQTMDMI ISKKKRMAMA RRTMFQKGEV HNKPSGFWM IKSVTTSAG SENLTIQOE VDALELSRQ LFLETADLYA TKERIEYSKT FKGYFNFLG YFFSYCVWK IFMATINIVF DRVGKIDPVT RGIEITVNYL GIQFDVKFWS QHISFLVGI IIVTSIRGLL ITLTKFFYAI SSSKSSNVIV LLAQIMGMV FVSSVLLIRM SMPLEYRTH TEVLGELQFN FYHRWFDVIF LVSA LSSILF LYLAKHQAPE KQMAP</p>	<p>Homo sapiens</p>
598	190599	G Protein-Coupled Receptor GPRC5B	NM_016235	<p>aggtgcaggg cgggcgttgc ttgaagcgggg gcgcgcggccg cgcgcagagc atgtgactgc ggcggaaggc cagcttggagc gtcggcgctg cggggcccgcg ggggttgat gttcgttgc tcaagagaga atagtagagc taccaggtg ctacacttc tctgtctt cgtgatcacc tctgttgcct ctgaaaaagc cagcacatcc cgtggtgtg ggtcgtgacct cctccatcag tacgtgtcc ttgtcgacct ggaacgcac tggggcattg ttgttggaggc ggttggccgggg ggcggcgccc tgaatcacat gctocitgag ctatctcc ttgttgcgtt gccccttalc aaggtgaagagg aagaaagagag cctgttgggc ctccacttc ttgtctct ggggaacccg ggccttttg ggttgtagtt tgccttalc atccagggagg acgagaacct ctgtctgtc cgcgccttcc tctgttggcgt ccttttgc ctctgtctt ccttgcct ttgaagcagga ttggcgctgc ggaaggttgt gtcggcaltggc acggggccccc cggggcttggca gcttgggtggc ctggcgctgt gcttgaatgt ggttcaaggt atcatcctg ttgaagtggt gttgtgtcacc gttgtgtgag acacaaggcc agccgtgcgc taccgaagcca tggactttt gattggccctc</p>	<p>Homo sapiens</p>

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MFVASERKMR AHQVLTLLL FVITSVASEN ASTSRGCGLD LLPQYVSLCD P  
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LGTGLGLT FAFIHEDET ICSVRRFLWG VLFALCFSL LSQAWVRRL  
VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF  
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599	190599	G Protein-Coupled Receptor GPCR5B	NP_057319.1		Homo sapiens
600	190602	G Protein-Coupled Receptor GPCR150	NM_014373		Homo sapiens

601	190602	G Protein- Coupled Receptor GPCR150	NP_055188.1	<p>tittacttiti ggtaaacatt tccattatit tgiatticag ggattitigia cttttaagca ttaggcticac taaataccac atctgocciat  tactcaaat tattctctti actiaaggct ttttgcattia tccagtttic ctgacagctt gtaabagatta ttgocctgaat ticttaaaa  caaccaagct ttcattiaag tgcataaat taittittt cttacacaga attuaattt ggattitcagt ccttgcttat gttttggagag  accagagccat ctaccaaaagc ctgaagggcac agaatgctia tctcgicac tgcctttct atgcacagcat tcaagagttac tggctgcat  tittcatggt gattgattita ttgttagcti tcaataacgt ttgggaagaa gttactacti ttgtaacagggc tatcagagata acttccata  tgaalgaac tatctatit tttcttiti catccacac cagtatacti gttgaagata aaaaaatit cttatccaag ctcatigcti  gttttcag ttacctggtia ccaattgac tactcaggt aatcattgti ttactaaag ttacattcc agcatatati gtagtagata  ttocctggti atactgtic aatagtttic tcaattgic agtgiattgg tttaattgc acaagcttaa tttaaaagac attggattac  ctttggatcc attgtcaac tggaaagict gcttcatcc acttaaat cctaacttg agcaaatga aagagcttata tcaataatga  tttgttaata ttataata aaggtttacag ctgtcataag atcataatt tatgaacaga aagaaacticag gacatatiaa aaaaataact  gaactaaaac aactttgccc ccttgaciga tagcatitca gaaigtgcti ttggaagggc tataccaggt attaaatagtt gttttattt  aaaaaataaa taattccaag aagttttat agttatticag ggacactata ttacaaatit tactttgta ttacacaaa aagtgataag  agttaacatt tggcttact gatttttgg ttactcaaaa aaactactgg atgcaaatc ttatgtaaat ctgagattic actgcaact  ttaagatac aacttaaaa ttittataa atgttcaaat gtaagcaaga aaaaaaaa</p>	P	Homo sapiens
602	190623	Melanopsin	AF147788	<p>MTALSSNCFS FQYQLRQTNQ PLDVNYLLFL IILGKLLNI LTLGMRKNT  CQNFMEYFCI SLAFVDLLLL VNISIL YFR DFVLLSIRFT KYHICLFTQI ISFTYGFLHY  PVFLTACIDY CLNFSKTKL SFKCQKLFYF FTVLIWISV LAYVLGDPAL  YQSLKAQNAV SRHCPFYVSI QSYWLSFFMV MILFVAFITC WEEVITLVQA  IRITSYMNET ILYFPFSSHS SYTVRSKKIF LSKLVQCLFS TWLPFVLLQV IIVLLK VQIP  AYIEMNIPWL YFVNSFLIAT VYWFNCHKLN LKDIGLPLDP FVNWKCCFIP  L TIPNLEQIE KPISIMIC</p> <p>ggtttccacc catagacaca cagctttccag ccaggacagc ttggggcagca gtaagctatag gtagacatctg gaggctgagg  cttccaccg ggocctctctg gcttccattgg atggcagggct cggggcagcag gaggctgcccag gttgggtgttgg gtagcaaaagg  tttggagcaca gaggcggccatg ggggagocctcc ccagttggggac agaaaggacag gtagtaggggg gttggggccct gtagtagatct  cagttgttacc cgtcaacggcti gtaggtgacag gcccattggag aaaggagcatt gtaggtgttag acgttggggcti ccaaaaggccc  caggctgggg gttccgagtc ctctgacti tccctgtagg gctcctttga gggctgtggc aocctgggta tgggattcc cggctcatgt  gtccacctga caaggcattc tccctgggac tctgtgcti gcttccatcac ctggcaccctc tcttaattag cagggtgttag  agttggggctc acattgtatg gtagctgttgg ttgactcaga attgctccca gctgtgttag gtaggttttaac cccatcata  aaacgcaagc agcttggcatt gaggcttaggg acagaaagaa aaggccggccc ctacagctca ccttggccccc aggtgtggct  ctgttagcca aaggccctga gtagtagagc ctacagtagga agcagatctg agccatggggc ttggcagctctg aggaagata  gtccccgctc ccagttagggc ttctccacti tctctgtc aaacctggggc ctccagtagga actgtttgta aagactgggg  gaaactctgg aagtagtaggt alactctgt ocatccagg gcttccatcac tccagctctag cccagagcagc cctccctgga  cttagtagga ccgctggcccg gttggggctcc cctaaacgca gctccttgg gtagggcttag cccagagcagc cctccctgga  agccgtgtgt tcaagctccc ttcttccag cctctgtctc ctctctaaag acagggggcag gggcagggccc ggggttccct  ccactctga catcagica acttgggata gggctgtcag cctgggtgttag ttcttgggac tctcccaata aggttttaaa aaatcttat  actttaaaa ttctgtccgg gcccagttgg tccagctgti aatctggca ctttgggttag ccgtaggtgtgg ttgataccct  gagggtcagga gttcgaagact agccctggcca acatgtgtga cttctggctc ttctaaatat acanaaatia gcccaggtgt  gtggcaggt ccttgaatcc cagttactctg gtagggcttag gtagtagaat ttcttgggac ttggagggcgg aagttgtcag  gagcttagat tgcacattg cactccaggc ttgggttagc agcagtagc ttccaaaaa aataaaaaa aaaaaataa  acttttat caaaaaagccc cctctgggac tgaatcac cttactgtac atctcttg tcttccatc tgggaagggg</p>	A	Homo sapiens





[illegible]

[illegible]



604	190627	G Protein- Coupled Receptor GPR41 & GPR42	NM_005304	GTWAAA WVPL PTVDPDHAH YLTGTVILLV GLTGMLGNLT VYTFCSR LRTPANMFII NLAVSDFLMS FTQAPVFTS SLYKQWLFGE TGCEFYAFCG ALFGISSMIT LTAIALDRYL VITRPLATFG VASKRRAAFV LLGVWLYALA WSLPFFGWS AYVPEGLLTS CSWDYMSFTP AVRAYTMLLC CFVFFLPLLI IYCYFIFR AIRETRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA PYSVALVAF AGYAHVLTPT MSSVPVIAK ASAIHNPIY AIHPKYRVA IAQHLPCLGV LLGVSRHSR PYPYSRSTR STLSHTSNL SWISRRRQE SLGSESEVGW THMEAAA VVG AAQANGRSL YGQGLEDEA KAPPRPQGHE AETPGKTKGL IPSQDPRM atggatacag gcccgacca gctctactc tccggcaalc acgtggtcgt cttctgggtg taccitctca ctttctgggt ggggctcccc ctcaacctgc tggccttggt ggtcttggtt ggcacagctgc agcgccggcc ggtggccgtg gacgtgcttc tgcctaacct gacccctcg gacctgcttc tgccttggtt cctgctcttc cgtatgggtg aggcagacca tggcatgcac tggccccgtc ccttacct cgtccacatc tctggatca tcttttacc caccatctat ctacccgcc tcttctggc agctgtgagc attgaacgt tctgaagtgt gggccaccca ctgtgtgata agaccggcc gaggctgggg caggcaggtc tgggtgaggt ggcctgctgg ctgtggcct ctgtctacgt cagcgtgtg tacgtcalag aattctcagg ggcacatctcc cacagccagg gcatcaatgg gacctgtac ctggagttcc ggaaggacca gctagccalc cttctggccg tgcggctgga gatggctgtg gctcttgg tggctccgt gatcalacc agctactgt acagccgctt ggtgtggtatc ctggcagag ggggacacca ccggccggcag aggagggtgg cggggctgtt ggcggccag ctgtcactt tcttctgt ctttggcc tacaacgtt ccatgtgt gggctatc tgcgggaaa gccggctg gaggatctac gtagcttc tcaagacct gaactctgt gtcgacct ttgtacta ctctctcc tccgggttc aagccgact tcaagctg ctgagaggt tgtgtgggt ctggggccag tggcagcagg agagcagcat gtagctgaag gtagcgaagg gaggggagga gcaaggagagc gaccgacag ctgaaagaa gaacagtaa cactcacagg gctgtggaac tggggccag ggggctgtg ctgaaagcta g MDTGPDSYF SGNHWVFVS YLLTFLVGLP LNLALVVFV GKQLRRPVAV DVLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIPTTY LTALFLAAVS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV YVIEFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIT SYCYSRLVWI LGRGGSHRRQ RRVAGLLAAT LLNFL VCFGP YNVSHVGYI CGESPAWRIY VILLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ WQESSMELK EQKGEEQRA DRPAERKTSE HSQGGTGGQ VACAES caagactgt cctctgoc gactaaca gattggagcc atggcttgg agcagaacca gtaacagat tattattag aggaaaaga atgaatggc actatgact acagtcaata tgaactgac tgaatcaag aagatgacag agaattgca aaagtutoc tccgtatt cctcaata gttttctga tggactgc aggcattcc atggtagtgg caattatgc clattacaag aaacagagaa ccaaaacaga tgtgtacac ctgaattgg ctgagcaga ttactct ctactctc tgcctttg ggcgttaat gcagttcag gggtgtttt agggaaaata atgtgcaaaa taactcag ctgtacaca caaacctt ctctggat gcagtttctg gctgtatca gcatagacag atatgtggca gtaactaag tccccagcca atcaggagtg ggaanaacct gctggatcat ctgttgtgt gtctggatgg ctgcatctt gctgagcata cccagctgg tttttatc agtaaatgac aatgttaggt gcatcccat ttccccgc taactaggaa calcaatga agcatgatt caaatgctag agatctgcat tggatttga gtaaccttc ttattagg ggtgtgtac ttatcacag caaggacact catgaagatg ccaaacatta aaatctctg acccttaaaa gttctgtca cagctgtat agtttcat gtactcaac tgcctataa callgtcaag ttctgcogag ccatagacat catctactc ctgatacca gctgcaacat gagcaaacgc atggatctcg ccatcaagt cacagaagc atgcactct ttacagctg cctcaacca atcctttag	sapiens
605	190627	G Protein- Coupled Receptor GPR41 & GPR42	NP_005295.1	atggatacag gcccgacca gctctactc tccggcaalc acgtggtcgt cttctgggtg taccitctca ctttctgggt ggggctcccc ctcaacctgc tggccttggt ggtcttggtt ggcacagctgc agcgccggcc ggtggccgtg gacgtgcttc tgcctaacct gacccctcg gacctgcttc tgccttggtt cctgctcttc cgtatgggtg aggcagacca tggcatgcac tggccccgtc ccttacct cgtccacatc tctggatca tcttttacc caccatctat ctacccgcc tcttctggc agctgtgagc attgaacgt tctgaagtgt gggccaccca ctgtgtgata agaccggcc gaggctgggg caggcaggtc tgggtgaggt ggcctgctgg ctgtggcct ctgtctacgt cagcgtgtg tacgtcalag aattctcagg ggcacatctcc cacagccagg gcatcaatgg gacctgtac ctggagttcc ggaaggacca gctagccalc cttctggccg tgcggctgga gatggctgtg gctcttgg tggctccgt gatcalacc agctactgt acagccgctt ggtgtggtatc ctggcagag ggggacacca ccggccggcag aggagggtgg cggggctgtt ggcggccag ctgtcactt tcttctgt ctttggcc tacaacgtt ccatgtgt gggctatc tgcgggaaa gccggctg gaggatctac gtagcttc tcaagacct gaactctgt gtcgacct ttgtacta ctctctcc tccgggttc aagccgact tcaagctg ctgagaggt tgtgtgggt ctggggccag tggcagcagg agagcagcat gtagctgaag gtagcgaagg gaggggagga gcaaggagagc gaccgacag ctgaaagaa gaacagtaa cactcacagg gctgtggaac tggggccag ggggctgtg ctgaaagcta g MDTGPDSYF SGNHWVFVS YLLTFLVGLP LNLALVVFV GKQLRRPVAV DVLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIPTTY LTALFLAAVS IERFLVAHP LWYKTRPRLG QAGLVSVACW LLASAHCSVV YVIEFSGDIS HSQGTNGTCY LEFRKDQLAI LLPVRLEMAV VLFVPLIT SYCYSRLVWI LGRGGSHRRQ RRVAGLLAAT LLNFL VCFGP YNVSHVGYI CGESPAWRIY VILLSTLNSC VDPFVYFSS SGFQADFHEL LRLCGLWGQ WQESSMELK EQKGEEQRA DRPAERKTSE HSQGGTGGQ VACAES caagactgt cctctgoc gactaaca gattggagcc atggcttgg agcagaacca gtaacagat tattattag aggaaaaga atgaatggc actatgact acagtcaata tgaactgac tgaatcaag aagatgacag agaattgca aaagtutoc tccgtatt cctcaata gttttctga tggactgc aggcattcc atggtagtgg caattatgc clattacaag aaacagagaa ccaaaacaga tgtgtacac ctgaattgg ctgagcaga ttactct ctactctc tgcctttg ggcgttaat gcagttcag gggtgtttt agggaaaata atgtgcaaaa taactcag ctgtacaca caaacctt ctctggat gcagtttctg gctgtatca gcatagacag atatgtggca gtaactaag tccccagcca atcaggagtg ggaanaacct gctggatcat ctgttgtgt gtctggatgg ctgcatctt gctgagcata cccagctgg tttttatc agtaaatgac aatgttaggt gcatcccat ttccccgc taactaggaa calcaatga agcatgatt caaatgctag agatctgcat tggatttga gtaaccttc ttattagg ggtgtgtac ttatcacag caaggacact catgaagatg ccaaacatta aaatctctg acccttaaaa gttctgtca cagctgtat agtttcat gtactcaac tgcctataa callgtcaag ttctgcogag ccatagacat catctactc ctgatacca gctgcaacat gagcaaacgc atggatctcg ccatcaagt cacagaagc atgcactct ttacagctg cctcaacca atcctttag	Homo sapiens
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607 190701 C-C Chemokine NP\_057641.1  
Receptor 11

P Homo sapiens

MALEQNQSTD YYEENEMNG TYDYSQYELI CIKEDVREFA KVELPVFLTI  
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VPFLIMGVY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPYNIVK FCRAIDIYS  
LITSCNMSKR MDIAIQVTES IALFHSLNLP ILVYFMGASF KNYVMKVAKK  
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608 190705 G Protein-Coupled Receptor SALPR NM\_016568

A Homo sapiens

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609	190705	G Protein- Coupled Receptor SALPR	NP_057652.1	<p>ggcagccagg acctgctcta ciaccacot ggcgtctgtg tciacagcgg ggccgcgtctac gacgtctctc ccagcagctc tgcctactga cgcaggctc aggccccagggg cgcgcgcgtc ggccagagggt gcttccccg ggccggtaaag aggtgaaagg atgaaggagg gctgggg</p> <p>MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPGDA PPGHPGSGG AESADTEARV RLISVVYVW VCALGLAGNL LVLYLMKSMQ GWRKSSINLF VTNLALTDFQ FVLTLFWAV ENALDFKWWF GKAMCKIVSM VTSNMNYASV FFLTAMSVTR YHSVASALKS HRTRGHGRGD CCGRSLGDSM CFSKALCVW IWALAALASL PSAFSTTVK VMGEELCLVR FPDKLLGRDR QFWLGLYHSQ KVLGFLVPL GHILCYLLL VRFIADRAA GTKGGAAVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PNQALTTWSI LIKFNAPFS QEYFLCQVYA FVSVCLAHS NSCLNPVLYC LVRREFRKAL KSLWRIASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYVPP GVVYSGGRY DLLPSSAY</p>	P	Homo sapiens
610	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NM_018970	<p>ggcacaggga tttactgt gctcaagt cagattata ctgtagagaa gatitatt ttgtttca ttaacagatt attataagc aaaaagcatg cagaaaaaga agcagacgti ttaattggg aataatgaa agcgtgtctg ctagtittg gtagagagac tgggaagtig tigtataaa ttataica cctccacaaa caaaactct cggaaatigt aaaaataagaa aatgcattat tciagaggca ttcctaaagca ccacgtgtc aggtttgtg ggtctgtgg taltatcga cgtttggac tggtagggc ttactggag ctcattct ggaaagcctt acaagactga ggaaatcag actgcgaac accgggaac gttcttgc agcacagaag caatctct cccalctc gcatattct atggcaaac aag'ggaa aagagggag catgactga gatcatca gttcttctg tggattat ttacgtaaa atgtatgat ctatcttc ctgttca tatagata atgagactg actgaggtg tatcttalc ctccatcat ctatggcga ctatggcat cagactga caatttgc aatctcgc ccttaacac cttctgaa actgactcc ttgggttca taataggagt cagcgtgtg ggcaacctc tgaiccat ttgtatg aagataaaga cttgtcatag agcacctac tacttccgt tggactttg ctgtcagt atctcagt ctgcaattg ttccattt ggttcaact ctgtcaaaa tggcttacc tggactalg ggcactigac tggcaagt atgcttct tgggggttt gttctgttc cacagctt tcatgctt ctgcatagt gtaccaagt actatgat cgtccatcac cgttctata caaagggt gacctttg acgtctgtg ctgtatctg tatgtgtg actgtctg tggcaltgc attccccg gtttagacg tggcactta ctatcat agggggggag atcaatgcac ctccaacac cgtcttca gggctaaiga ttcttagga ttatgtctg ttctgtct catctcta gccacacagc ttgttacct caagctgata ttttctgc acgtatgaa aaaaatgaa ccaatccagt ttgtagcag agtcagccag aactggacti tcatgtcc tggagccagt ggccagcag ctgtccaatg gctagcagga ttggaaagg gttccacac accacactg ctggggcata ggcaaaalg aaacacaca ggcaagaaga ggtattgtt cttagacgag tcaaaalg agaaagaat cagcaggaatg ttctataa tgaattct gttttaac ttgtggggcc ctactgtgt tggagaggt ttgcaagagg gctgtatgta ccagggggt tttaacagc tgcgtctg atgatttg ccaagcagg aatcaatct ttgtctgca ttttcaca cagggggtc aggggtgt tgcagacac ccttttacc tgcagaaat ccaagttacc aaggggaact tactgtgta tatggggag catctgaaa tcttagcct tggaaaaact aactctct gctgtgcaat tgggtccat agccattt tgaagaaga ttcaagaatg gaatcagcag tttaaggat tggggcaaca ttctgcagc ttggcaatag ttaccata atctattt aaatctaga gtgactc tgaactcag caaggttg taattaga aaaggactgaac cactgacct agttctta tgggttcaaa aactagaata tgaagagagc aggtgtctag talcaggtct aatgtctg tatgtcata catatgaaa aacatcaaa aacaatagc atggacatc taataaat aagt'gcat gtaggtaaat tgtgataa aactattt agaggttga agactttaa acatttata ctactgt ttgcaaga ctaaaat tggggactta aggtactga atccactaa gacgtgcaa tgaatttg gatatcaca cttaaaac cgccttga gttctgggga gcatccaaa gcagtatatt ggttcaatt agagttact ttittgat taatacatg ctattctaa</p>	A	Homo sapiens

611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>alaccactt cctcatctac tagtaagatt gctagcatgg aactglatia tgggtttt tggattgg tataaagtt ttccaatca ttatattt acaaatgcta galatggic tggaggagcaa catlaatggt accagcgtgt cacacagag cagttctaat aatgcagaat aaatacatgt tgccttaag ggtatctag tatcctat cttaatgc actggagcaa atagccaagg gaaatcaaat cagttaactgg tcalggcat gcatcaaaa gfgcaggaa galcatiat tacttttcc ttitttct acatggttg aaacttaaa gacacatcac tgaataatg agattttt ctacgggig ciacccttc taaactgic taaagaagcag gcagtgatg tatgttata tttaagica gcgtcaagg ggaaccaca gccttagiat gacatcctgc acaattgg aagcaattat tctacigaag gcacagict gttatact tctgcacatt cagtgatg gtaattaaa ttatfcagt tttaactgt gaaagcttat attatgatt ctggatttt agaaalacal tagagctgt gtagctcat cttaagata cagatggig aactcaata taaagtga ttgccaata ttacocgig tagocgttta attttctga aataagttt acatttgg cacatacaa cgtttttt aattggag gcaagcaca aciaaggaa ctactttat taigtttgg ctitttgg cttagctia ctatctca gactggaaat gtagaaga taatcaaat aatgcigata aactgacata ataatctg laaagcaatt atttggtat ttatataat catccctcia ttacttaa algccagtag tattagaga tggtagccig cttagttaat tggctcagaa tttaataa aacatcacac tttaattgg agcatagiac calagaaatt tggggttcia aatataaac ttgtaagaag aatgggttac actaacata tgaacaaact agaaaagtt attatttgg ttgcttct gttgttgg ttattgggtg gtrtttga agttattt ttnttgg taagataat aagattaga atcaataac acagaattcc atattgctat agtacttctg taagagaat atcaataa ataggaataa taaatcaag aatgttca atgttaaa aaaaaaaa aaaa MANYSHAADN ILQNLPLTA FLKLTSLGFI IGVSVVGNLL ISILLVKDKT LHRAPYYELL DLCCSDILRS AICFPFVENS VKNGSTWYTG TLTCKVIAFL GVLSCFHTAF MLFCISVTRY LAIAHHRFYT KRLTFWTCLA VICMVWTLVS AMAFPVLDV GTYSFIREED QCTFQHRFSR ANDSLGFMLL LALLLATQL VYLKLIFFVH DRRKMKPVQF VAAVSQNWTF HGPASGQAA ANWLAGFGRG PTPPTLLGIR QNANTTGRRR LLVLDEFKME KRISRMFYIM TFLFLT WGP YL VACYWRVF ARGPVVPGGF LTAAVWMSFA QAGINPFVCI FSNRELRRCF STLLCYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggctaggg agctcttc caggggccc atcggtccc actgggggggt gctgtcaag tgcgtgggt acagaaggc cgcatccgac ccccttggf actcttact ggcacaccag taocgcataa gctgcaagg gattcigaac aggtctcgg acagagctc catccactcc tctggcctca caggcactc tcacagccag aacattcgc cgggtctga g MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRRQA PALFTLNLTC GNLLCTVNM PLTLAGVVAR QPAGDRLCR LAFLDTFLA ANSMLSMAAL SIDRWVAVVF PLSYRAKMRL RDAALMVAYT WLHALTFPAA ALALSWLGFH QLYASCTLCS RRPDERLRF VFTGAFHALS FLFSFVLCC TYLKVARFHC KRIDVITMQT LVLLVDLHPS VRERCLLEEQ RRRQRATKKI STFIGTFLVC FAPYVITRLV ELFTSTVPIGS HWGVLSKCLA YSKAASDPFV YSLLRHQRK SCKEILNRL HRRSHSSGL TGDSSHQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>atggccaaca ctacggaga gcctgaggag gtgagcggcg ctctgtccc accgtccgca tgaagtatg tgaagctggt actctggga ctgattatgt gcgtgagcct ggccggggaac gccatctgt cccgtctggt gctcaaggag cgtggccctgc acaaggctcc ttactctc cgtctggacc tggcctggc cgtatggcgc cgtctggcgc tctgtccc ctgtgtgctg gctctggtg ggcaggctc ttcatggacc ttcatggcac tcatgtgcaa gatttggcc ttatggccg tgcctttg ttccatgcg gccctcagc tgttttgcac cagcgtcacc cgtatcagg ccacggcca ccacgcttc tacggcagc gcatgacact ctggacatgc ggcgctgca tctgcatggc ctggaccctg tctgtggcca tggccttccc accgtctt gacgtgggca cctacaggt tattoggag gaggaccagt gcatcttga gcatgctac ttcaaggcca atgacagct ggggcttcatg ctatgtgg cttgtctcat</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969		A	Homo sapiens



615	190741	Sreb3	NP_061842.1	<p>                     ggcaagctacc cagctgct accggcaagct gctctcttc gtagtatcgt accgcagat gtagccagtg cagatggtgc                      cagccatcag ccaggaactgg acattccatg gtccggggggc caccggccag gctgctgcca actggatgc cggcttggc                      cgtggggccca tggccaccaac cctgctgggt atccggcaga algggcagtc agccagccgg cggctactgg gcatggacga                      ggtcaagggt gaaagcagc tgggocgcat gttacacg atcacactgc tcttctgt cctctgggtca cctatcag                      tggcctgcta ctggcagtg ttgtgaaag cctggtgtgt gcccaccgc taacctggcca ctgctgttg gtagtgctc                      gcccagctg ccgtcaacc aattgctg ttccgtcta acaaggacct caaggagtg ctagggactc acgccccg                      ctggggcaca ggaggggcc cggctccag agaacctac tgggtcgt ga                      MANNTGEPEE VSGALSPSA SAYVKL VLLG LIMCVSLAGN AILSLVLKE                      RALHKAPYYF LLDLCLADGI RSAVCFPV L ASVRHGSSWT FSALSCKIVA                      FMAVLFCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL                      SVAMAFPPVF DVGTYKFIRE EDQCFEHRF FKANDTLGFM LMLAVLMAAT                      HAVYKLLLF EYHRKMKPV QMVPISONW TFHGPATGQ AAANWTAGFG                      RGPMPPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLLFLLWS                      PYIVACYWRV FVKACAVPHR YLATAVVMSF AQA AVNPVVC FLNKLKCK                      LRTHAPCWGT GGAPAPREPY CVM                 </p>	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	<p>                     gtagctgtc cacagactag agcagggaag ggggggaag cggcgataga gtaggcag aatgttaat tatcaggagc                      aggaacagaa ctgagggcat gcccaggctc acacaggccc tcataggccc agtgttcca ggggggagga aacaggagc                      tggacttc tctctt tctctgtc ttaggtc aagggtcag ctgctggagt gaattccac ctgtttagt tggcactgt                      ccttgggtat ggttaagcc tctgagcc atcagccac aaacaccca aactctct tgaataat attacataa attgtatt                      cacatgatt ctctcagc atcagccac tctgtgag cagactaac tgaataatt aagcaagaaa acaggcttag                      gggagtaaaag taactctcc agtcacagc ctggtgagca gcaagcttgg gactcggcag cctccgctct tctctct                      ggaacccat gctgattccc tgcctcag ccacttcca gggccctgc ttggggccc aagggaacac ttgtgcaga                      ggaaggagc ctctgactg ttagggaacag aggcagctct agttgggtc ctgtcctc tgggacaggg aaactccag                      ctctctcct ggggtggagc ctggggctg cctccatag gggggtaact ctctctc cctctct ctggcaltta gtagccctct                      tacaagggg cgcagtcaca tataccctgg cattcaggct gttgctctggc ctggccacc taacccaat ctgacaac                      aggaagggtg tgggtgtcc ttocacac cctcccttg aggtgtgggg gttgggccaagg gctcacaga gggccagag                      aaggcactaa ttacacagc tcttccag agccttcat gggctctgcc agtctggcag acatggcag acctcttc tcaagccac                      caaltctga tggcctgca tggccacat caatctct gctctccac ccacattct ctgggccaat gctccggag                      gcagtgtgt gtagtctgta gtagtctca tgcctgca atctagcc ctggagctca gttgtgccc gggctatggg                      ctgtggggg ccattggtt gctgggaat ttggcggtg tgggtgact gtagtaactgt gcccggagag cccctggccc                      acctcagac acctgctt tcaacctggc tgggcggac ctgggactgg cactcactt cccctttgg gcaagccgag                      cggcacctgga ctctcag ccttccggag gttcccttg caagtaggtt ctgacggcca ctgtctcaa cgtctatggc                      agcatctcc tcaacagc gctgagcgtt gctgctact ggggtgggtggc caggtgtgct ggggccaagcca ccaacttc                      actctctgg gcccgaatag ccaacctggc aggtggggc gctggctgccc tgggtgaggt gccaagagct gcttccgggg                      tggaggggtga ggtgtgtgt gttgctctt gctgtgctg ttcccagc aggtgactggc tggggggcca ccaagctgca                      aggtgtgtg tgggtttcat gttgcccctt gctgtgctg tttcccagc cctgctgct ctggcctcc tgcaggggctg                      gcaacggctg cggcaggaaca gcaagggctgt gggcccctct gttccgcatcc tgggtggctt ctctctc tgggtttc                      ccaacatgt ggtcacttc tgggtgtgt tgggtgaggt tgaactgtgt cctgggaca gtagcttcta tactatcag actgtatgt                      tccctgtcac tactgttg gcaacagca alagctgtct caacctgtg ctgtactgt tcttgagggc gtagggccc                      caggctctgg caggcactt cagggtactc aggtcgaagc tgggtggagc ggggggagc tgggtggcaac aggtggccct                 </p>	A	Unidenti



619	190743	G Protein-Coupled Receptor GPRC5D	NP_061124.1	gatcaggag gaggataa MYKDCIESTG DYFLLCDAEG PWGILESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLFLSV LGLFGLAF AF IIELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSWTIL CIAIGCSLLQ IIAITEYVIL IMTRGMFVN MTPCQLNVDF VLLVYVLF MALTFVSKA TFCGPCENWK QHGRLLIFTV LFSIIIWVWV ISMLLRGNPQ FORQPQWDDP VVCIALVTNA WVFLLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEEDVA LSYGTPIQP QTVDPTQECF IPQAKLSPQQ DAGGV cgggcaaggg ggggaacctc ctgaagagtg ccttggtcac agcaccttg aagacagcca ttggccatgg gggaccaac agagccggc ctgggagcca ggaagccat ccacaagcc ttggtgatg gcttgggact gctctcttc ctgtccag gggctgggc ccaggggcat gtcacccg gctgacagcca aggcctcaac cccgtgact acaacctgig tgaaccctc ggggcgtggg gcatcgctt gggggccgig gctggggcgg gcatgtcac cagtttgig ctacacatca tctgggtggc cagccctccc ttgtgcagg acacaaagaa acggagccg ctggggacc aggtattct cttctgggg accctggggc tctctgctt cgttttggc tgtgtgtga agcccgact ctacacct gctctcggc gcttcttt tgggtgtcig ttgccatct gctctcttg tctggcggct cagctttg cctcaacti cctggcccgg aagaacaccg gggcccgggg ctgggtgtatc ttcactgtgg ctctctgctt gacctgtga gagggtcalca lcaalacaga gttgtgtatc atcacctgg ttggggcaga tggcgagggc gggccctcagg gcaacagcag cgcagggcgg gcccgtggc ccccctgtgc cgtcgccaac atggacttg tcaggcact calctacgtc atgctgtctc tgcctggggc cttcctgggg gctcgtggccg cctctgtgtg cggctacaa cgtgtgggta agcatgggtt cttgtgtc ctacacag ccaacctcgt tggccatgg gttgtgtgga tctgtatga tactacggc aacaagcag acacagctc cacttgggat gacccacgc tggccatcgc cctgcggcc aatgctggg ccttgctt ctctacgc atcccgagg ttccaggt ttccaggt gacaaagtc agccagagc aagacatcca ggggtgacatg taccacacc gggcggggg ctatgagacc atctgaaag agcagagagg tcaagagcatg ttgtgtgtga acaaggcctt ttccatggat gggccgggtg cagctaaagg gcccgtgtca ccaalacagc gttacaatgg gcaagctgtg accaggtgt accagccac tgaatggcc ctgaagcaca aagtctcgc gaaaggagct tacgacatca tcttccacg gggccacggcc aacagccagg tgaaggcag tggcaactgc accctgggg ctgaagagat gtaactggcc cagagccacc agggcgccac accgcgaaa gacggcaga actctcaggt ctttagaac cctacgtgt gggactgagt cagcggtggc gaggagaggc ggcgggatt ggggagggcc ctgaaggact gggcccggc aaggagctct cagggtctt cctcccccgt gcaaggcagc aacatgtgcc ccagatcgg aagggtccc ctctgtcca gttttgggt ggggtgtcatg ggtgtccca ccactctc agtgtgtg ggtgtgagga gccaacccca gctctctgc aggtacact cggcggtcac actocagcca aalagtgtc tcgggggtgt ggtgtggcag cgtctatgt tctgtgtga ttctgtcaac ctcaagagac ttccagggcg ctcaaggctg gactgtct ctctgtgag acaagggtg cctaataat acatttgc ttatataa aaaaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTFTVLT IILVASLPV QDTKKRSLLG TQVFLLGTL GLFCLVFCV VKPDFSTCAS RRFLFGVLFA ICFSCLAHV FALNFLARN HGRGWVIFT VALLTLVEV IINTEWLIT LVRSGEVGGP QGNSSAGWAV ASPCAVANMD FVMALYVML LLLGAFLGAW PALCGRYKRW RKHGTVFLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLALAAANA WAFVLYVIP EVSQVTKSSP EQSYQGDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYOPTMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VVD	P	Homo sapiens
620	190744	G Protein-Coupled Receptor GPRC5C	NM_018653	cggcagggg ggggaacctc ctgaagagtg ccttggtcac agcaccttg aagacagcca ttggccatgg gggaccaac agagccggc ctgggagcca ggaagccat ccacaagcc ttggtgatg gcttgggact gctctcttc ctgtccag gggctgggc ccaggggcat gtcacccg gctgacagcca aggcctcaac cccgtgact acaacctgig tgaaccctc ggggcgtggg gcatcgctt gggggccgig gctggggcgg gcatgtcac cagtttgig ctacacatca tctgggtggc cagccctccc ttgtgcagg acacaaagaa acggagccg ctggggacc aggtattct cttctgggg accctggggc tctctgctt cgttttggc tgtgtgtga agcccgact ctacacct gctctcggc gcttcttt tgggtgtcig ttgccatct gctctcttg tctggcggct cagctttg cctcaacti cctggcccgg aagaacaccg gggcccgggg ctgggtgtatc ttcactgtgg ctctctgctt gacctgtga gagggtcalca lcaalacaga gttgtgtatc atcacctgg ttggggcaga tggcgagggc gggccctcagg gcaacagcag cgcagggcgg gcccgtggc ccccctgtgc cgtcgccaac atggacttg tcaggcact calctacgtc atgctgtctc tgcctggggc cttcctgggg gctcgtggccg cctctgtgtg cggctacaa cgtgtgggta agcatgggtt cttgtgtc ctacacag ccaacctcgt tggccatgg gttgtgtgga tctgtatga tactacggc aacaagcag acacagctc cacttgggat gacccacgc tggccatcgc cctgcggcc aatgctggg ccttgctt ctctacgc atcccgagg ttccaggt ttccaggt gacaaagtc agccagagc aagacatcca ggggtgacatg taccacacc gggcggggg ctatgagacc atctgaaag agcagagagg tcaagagcatg ttgtgtgtga acaaggcctt ttccatggat gggccgggtg cagctaaagg gcccgtgtca ccaalacagc gttacaatgg gcaagctgtg accaggtgt accagccac tgaatggcc ctgaagcaca aagtctcgc gaaaggagct tacgacatca tcttccacg gggccacggcc aacagccagg tgaaggcag tggcaactgc accctgggg ctgaagagat gtaactggcc cagagccacc agggcgccac accgcgaaa gacggcaga actctcaggt ctttagaac cctacgtgt gggactgagt cagcggtggc gaggagaggc ggcgggatt ggggagggcc ctgaaggact gggcccggc aaggagctct cagggtctt cctcccccgt gcaaggcagc aacatgtgcc ccagatcgg aagggtccc ctctgtcca gttttgggt ggggtgtcatg ggtgtccca ccactctc agtgtgtg ggtgtgagga gccaacccca gctctctgc aggtacact cggcggtcac actocagcca aalagtgtc tcgggggtgt ggtgtggcag cgtctatgt tctgtgtga ttctgtcaac ctcaagagac ttccagggcg ctcaaggctg gactgtct ctctgtgag acaagggtg cctaataat acatttgc ttatataa aaaaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTFTVLT IILVASLPV QDTKKRSLLG TQVFLLGTL GLFCLVFCV VKPDFSTCAS RRFLFGVLFA ICFSCLAHV FALNFLARN HGRGWVIFT VALLTLVEV IINTEWLIT LVRSGEVGGP QGNSSAGWAV ASPCAVANMD FVMALYVML LLLGAFLGAW PALCGRYKRW RKHGTVFLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLALAAANA WAFVLYVIP EVSQVTKSSP EQSYQGDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYOPTMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VVD	A	Homo sapiens
621	190744	G Protein-Coupled Receptor GPRC5C	NP_061123.2	cggcagggg ggggaacctc ctgaagagtg ccttggtcac agcaccttg aagacagcca ttggccatgg gggaccaac agagccggc ctgggagcca ggaagccat ccacaagcc ttggtgatg gcttgggact gctctcttc ctgtccag gggctgggc ccaggggcat gtcacccg gctgacagcca aggcctcaac cccgtgact acaacctgig tgaaccctc ggggcgtggg gcatcgctt gggggccgig gctggggcgg gcatgtcac cagtttgig ctacacatca tctgggtggc cagccctccc ttgtgcagg acacaaagaa acggagccg ctggggacc aggtattct cttctgggg accctggggc tctctgctt cgttttggc tgtgtgtga agcccgact ctacacct gctctcggc gcttcttt tgggtgtcig ttgccatct gctctcttg tctggcggct cagctttg cctcaacti cctggcccgg aagaacaccg gggcccgggg ctgggtgtatc ttcactgtgg ctctctgctt gacctgtga gagggtcalca lcaalacaga gttgtgtatc atcacctgg ttggggcaga tggcgagggc gggccctcagg gcaacagcag cgcagggcgg gcccgtggc ccccctgtgc cgtcgccaac atggacttg tcaggcact calctacgtc atgctgtctc tgcctggggc cttcctgggg gctcgtggccg cctctgtgtg cggctacaa cgtgtgggta agcatgggtt cttgtgtc ctacacag ccaacctcgt tggccatgg gttgtgtgga tctgtatga tactacggc aacaagcag acacagctc cacttgggat gacccacgc tggccatcgc cctgcggcc aatgctggg ccttgctt ctctacgc atcccgagg ttccaggt ttccaggt gacaaagtc agccagagc aagacatcca ggggtgacatg taccacacc gggcggggg ctatgagacc atctgaaag agcagagagg tcaagagcatg ttgtgtgtga acaaggcctt ttccatggat gggccgggtg cagctaaagg gcccgtgtca ccaalacagc gttacaatgg gcaagctgtg accaggtgt accagccac tgaatggcc ctgaagcaca aagtctcgc gaaaggagct tacgacatca tcttccacg gggccacggcc aacagccagg tgaaggcag tggcaactgc accctgggg ctgaagagat gtaactggcc cagagccacc agggcgccac accgcgaaa gacggcaga actctcaggt ctttagaac cctacgtgt gggactgagt cagcggtggc gaggagaggc ggcgggatt ggggagggcc ctgaaggact gggcccggc aaggagctct cagggtctt cctcccccgt gcaaggcagc aacatgtgcc ccagatcgg aagggtccc ctctgtcca gttttgggt ggggtgtcatg ggtgtccca ccactctc agtgtgtg ggtgtgagga gccaacccca gctctctgc aggtacact cggcggtcac actocagcca aalagtgtc tcgggggtgt ggtgtggcag cgtctatgt tctgtgtga ttctgtcaac ctcaagagac ttccagggcg ctcaaggctg gactgtct ctctgtgag acaagggtg cctaataat acatttgc ttatataa aaaaaaaaaa aaaa MGTPPEPLG ARMAHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTFTVLT IILVASLPV QDTKKRSLLG TQVFLLGTL GLFCLVFCV VKPDFSTCAS RRFLFGVLFA ICFSCLAHV FALNFLARN HGRGWVIFT VALLTLVEV IINTEWLIT LVRSGEVGGP QGNSSAGWAV ASPCAVANMD FVMALYVML LLLGAFLGAW PALCGRYKRW RKHGTVFLT TATSAIVWV WIVMYTYGNK QHNSPTWDDP TLALAAANA WAFVLYVIP EVSQVTKSSP EQSYQGDMYP TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYOPTMALM HKVPSEGA YD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VVD	P	Homo sapiens

[illegible]

624	190748	GPCR Ls190748	AX147756		A	Homo sapiens
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625	190748	GPCR Ls190748	CAC39548.1		P	Homo sapiens
<p>atggccaact ccacaggggct gaaagccctca gaaatcgagc gctcgttggg gttgactctg gcaagctgtg tggaggtggg  ggcactatctg ggaacaggcg cgtctgtgtgt cgtcagccgg gactgtcgga cgtgctctac ctggcgcacc  tgtgtgtgt ggaactgtct gggggccgct ccatcatgccc gttggggctg tctcgcggc gctgtggccc gctgggggtggc  gtggcttgg gcccggcgcc atggcgcgcc gctcgtcttc tctcgcggc tctgtgtggc gctgtggccc tgggggtggc  cggcacttgg ctggcactgt accgctcat cgtgacccc gttgggccc gctgtggccc gctgtggccc tgggggtggc  ccggcgtgt gggcgcgggc ggaactgtctt cctgtgtggc cgtcggccc caccggccc tggcttctgt  cgtgtgttgg tctgtgttgg gggctcgggg ccttccggc cgtctgtggc cgtgtgtggc tggcgtgtgt cgtgtgtgt  gctgtgtgt gcttaccggc gcatcttct ggtgtgtgt cgtgtgtgt tgaagggccc accggggggc cgtgtgtgt  gactcgtct ggaactctg gtagggccc ttccatctt gcccggc cgtgtgtgt tggcgtgtgt cgaaggtggc  ctggggccc cgtgtgtgt ggggccaatt gcaagctgtt gggctgtt tggctgtt tggctgtt tggctgtt cgtgtgtt  ggcgcgggaa gcccgaaggc gttcacctg ggtgtgtt tggctgtt cgtgtgtt cgtgtgtt cgtgtgtt cgtgtgtt  agcgcccggt ggcgttggca ctggggccc tctcggc tgcactgtt ggaactgtt gggctgtt cgtgtgtt cgtgtgtt  tggcaccgc gggcactt gcaatgctc cagaagccc cagaagggc cttctgtt gttcgtt cttcagaaca  ggacccgg tggcaggag ggcggagccc cgtacacag gggccactt agagtctt cttctga  MANSTGLNAS EVAGSLGLIL AAVVEVGALL GNGALLVVVL RTPGLRDALY  LAHLCVVDLL AAASIMPLGL LAAPPGLGR VRLGPAPCRA ARFLSAALLP  ACTLGVAALG LARYRLVHP LRPGRPPPV LVLTAVWAAA GLLGALSLLG  PPPAPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGFVVAR</p>						
626	190749	G Protein-Coupled Receptor GPR62	AF317653		A	Homo sapiens
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1		P	Homo sapiens



629	190774	Histamine H4 Receptor	NP_067637.2	<p>acattttat agtttggtta tttttgtcc tttaaaaca ttitttttt agatgggggt ctgtcttgt tgcacagca ggaagtcagt ggatgctct cagctcactg cagccctgac tgcctaggt ccagcaatct tcttacgca gctccagag tagctgggac cgaggagact tgcacacag cccactaaa atttttaa atgtgctt tcttgagt gttctgtcc tgtctgtc acaaatlc attttica tagttaatt cactctcg gaagattt atgttggt tttaaac ttgcagtc ttacacgt ttggattt calgttct agaaactta aaccttaac tcaaacatt aaaatacaag tcttttaagt acatggagtc ttgaaatgt acaataatg talataact tatgtcttac attaaagtc aatatgagaa alacatgtt aacatcaat aataattta aaaatttg aaataaact tcaataatgc aaaaaaaa aaaaaaaa</p> <p>MPDNTNSTNL SLSTRVTLAF FMSLVAFAIM LGNALVILAF VVDKNLRHRS P Homo sapiens</p> <p>SYFFLNLAIS DFFVGVISIP LYPHITLFEW DFGKEICVFW LTDDYLLCTA SVYNVLISY DRYLSVSNVAV SYRTQHTGVL KIVILMVAWV VLAFVNGPM ILVSESWKDE GSECEPGFFS EWTALATSF LEFVIPVLV AYFNMYIWS LWRDHLSRC QSHPGLTAVS SNICGHSFRG RLSSRRSLSA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVLLRARR LAKSLAILLG VFAVCWAPYS LFTIVLSFYS SATGPKSVWY RIAFWLQWFN SFVNPLLYPL CHKRFOKAFK KIFCKKQPL PSQHSRSVSS</p> <p>ccagaccta gaactaocca gagcaagacc acagctgggt aacagtccag gagcagacaa galgagaca aatctctc tcccacagaa catcttgga gggacacctg ctgaictgc tggtaictc ttcttgata tcaactta tctgtatt gcagcacct tigtctcgg ggtctgggc aacgggcttg tgaictgggt ggcctggatc cggatgacac acacagtac caccatcgt tacctgaac tggcgtggc tgaactcgt ttacctcca ctgttcatt ctacatgt cggagagtc ttctgacg cctcatig tctggaccg ggcgtgttc tgrcaaat cgtcttacc atagtggaca tcaactgt cggagagtc ttctgacg cctcatig tctggaccg tgrgttgc tctgcatoc agctggacc cagaaccacc gcaccgtgag cctggcaag aagtgatca tggggcctg gggttggt ctgctocca catggcagt tatcattgt gtagctacag taacttgtaa aacggggaca gtagctgca cttaact ttggccctgg accaagacc claaaagag gagaaatgt gccgttgca tgttagcgt gagagggatc atocggatca tcattggctt cagcgacacc algctcatg ttgctgicag ttatggctt atggcctt atggcctt atggcctt atggcctt gtcgtccctt acgggtctc tctgtgtc cagcagcct ttctctgc tggccccc atagccat atagccat ggccttata ggcacagca gaatccgga gtaatgcaa ggcagtaaa agaaatgg tatgtcagtg gtagtgaca gtagctgac cagccctc cgtctcaac agctgctca acccatgt ctatgttc atggccagg acttcaggga gagctgac cagccctc cgtctcaac ggagaggggc ctgaccagg actaocca aaccagtag acagctacca attactt acccttga gaggtggagt tacaggcaaa gtagaggagg agctggggga cacttcag cctccagtc cagctctgc tcaactgag ttggctgag cacaggcatt tctgtctat ttaggata cccactatc agaaaaaaa aaaaaagct tigtgtccc ttattgggg agataaaca gatatggtt</p> <p>METNSLPNTN ISGTPAVSA GYLFDIITY LVFAVTVLG VLGNGLVWV P Homo sapiens</p> <p>AGFRMTHVT TISYLNLA VA DFCFTSTLP FMVRKAMGGH WPFGWFLCKF VFTIVDNLFS GSVFLIALIA LDRVCVCLHP VWTQNHRTVS LAKKVIIGPW VMALLLTLP IIRVTVPGK TGTVACTFN SPWNTDPKER INVAVAMLTV RGIIRFIIGF SAPMSIVS YGLIA TKHK QGLKSSRPL RVLSFVA AF FLWSPYQVW ALJATVRIRE LLQGMKEIG IAVDVTSALA FFNSCLNPML YVFMGQDFRE RLJHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p> <p>atggaacca acttctcat tctctgaat gaactgag aggtgtcc ttgagctgt ggcacacag tctgtgat ctctcatg A ctagtccag gagtacatt tgtctggg gtctgggg atggctgt gactgggt gctggatc gtagacag</p>	
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>ccagaccta gaactaocca gagcaagacc acagctgggt aacagtccag gagcagacaa galgagaca aatctctc tcccacagaa catcttgga gggacacctg ctgaictgc tggtaictc ttcttgata tcaactta tctgtatt gcagcacct tigtctcgg ggtctgggc aacgggcttg tgaictgggt ggcctggatc cggatgacac acacagtac caccatcgt tacctgaac tggcgtggc tgaactcgt ttacctcca ctgttcatt ctacatgt cggagagtc ttctgacg cctcatig tctggaccg ggcgtgttc tgrcaaat cgtcttacc atagtggaca tcaactgt cggagagtc ttctgacg cctcatig tctggaccg tgrgttgc tctgcatoc agctggacc cagaaccacc gcaccgtgag cctggcaag aagtgatca tggggcctg gggttggt ctgctocca catggcagt tatcattgt gtagctacag taacttgtaa aacggggaca gtagctgca cttaact ttggccctgg accaagacc claaaagag gagaaatgt gccgttgca tgttagcgt gagagggatc atocggatca tcattggctt cagcgacacc algctcatg ttgctgicag ttatggctt atggcctt atggcctt atggcctt atggcctt gtcgtccctt acgggtctc tctgtgtc cagcagcct ttctctgc tggccccc atagccat atagccat ggccttata ggcacagca gaatccgga gtaatgcaa ggcagtaaa agaaatgg tatgtcagtg gtagtgaca gtagctgac cagccctc cgtctcaac agctgctca acccatgt ctatgttc atggccagg acttcaggga gagctgac cagccctc cgtctcaac ggagaggggc ctgaccagg actaocca aaccagtag acagctacca attactt acccttga gaggtggagt tacaggcaaa gtagaggagg agctggggga cacttcag cctccagtc cagctctgc tcaactgag ttggctgag cacaggcatt tctgtctat ttaggata cccactatc agaaaaaaa aaaaaagct tigtgtccc ttattgggg agataaaca gatatggtt</p> <p>METNSLPNTN ISGTPAVSA GYLFDIITY LVFAVTVLG VLGNGLVWV P Homo sapiens</p> <p>AGFRMTHVT TISYLNLA VA DFCFTSTLP FMVRKAMGGH WPFGWFLCKF VFTIVDNLFS GSVFLIALIA LDRVCVCLHP VWTQNHRTVS LAKKVIIGPW VMALLLTLP IIRVTVPGK TGTVACTFN SPWNTDPKER INVAVAMLTV RGIIRFIIGF SAPMSIVS YGLIA TKHK QGLKSSRPL RVLSFVA AF FLWSPYQVW ALJATVRIRE LLQGMKEIG IAVDVTSALA FFNSCLNPML YVFMGQDFRE RLJHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p> <p>atggaacca acttctcat tctctgaat gaactgag aggtgtcc ttgagctgt ggcacacag tctgtgat ctctcatg A ctagtccag gagtacatt tgtctggg gtctgggg atggctgt gactgggt gctggatc gtagacag</p>	
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>ccagaccta gaactaocca gagcaagacc acagctgggt aacagtccag gagcagacaa galgagaca aatctctc tcccacagaa catcttgga gggacacctg ctgaictgc tggtaictc ttcttgata tcaactta tctgtatt gcagcacct tigtctcgg ggtctgggc aacgggcttg tgaictgggt ggcctggatc cggatgacac acacagtac caccatcgt tacctgaac tggcgtggc tgaactcgt ttacctcca ctgttcatt ctacatgt cggagagtc ttctgacg cctcatig tctggaccg ggcgtgttc tgrcaaat cgtcttacc atagtggaca tcaactgt cggagagtc ttctgacg cctcatig tctggaccg tgrgttgc tctgcatoc agctggacc cagaaccacc gcaccgtgag cctggcaag aagtgatca tggggcctg gggttggt ctgctocca catggcagt tatcattgt gtagctacag taacttgtaa aacggggaca gtagctgca cttaact ttggccctgg accaagacc claaaagag gagaaatgt gccgttgca tgttagcgt gagagggatc atocggatca tcattggctt cagcgacacc algctcatg ttgctgicag ttatggctt atggcctt atggcctt atggcctt atggcctt gtcgtccctt acgggtctc tctgtgtc cagcagcct ttctctgc tggccccc atagccat atagccat ggccttata ggcacagca gaatccgga gtaatgcaa ggcagtaaa agaaatgg tatgtcagtg gtagtgaca gtagctgac cagccctc cgtctcaac agctgctca acccatgt ctatgttc atggccagg acttcaggga gagctgac cagccctc cgtctcaac ggagaggggc ctgaccagg actaocca aaccagtag acagctacca attactt acccttga gaggtggagt tacaggcaaa gtagaggagg agctggggga cacttcag cctccagtc cagctctgc tcaactgag ttggctgag cacaggcatt tctgtctat ttaggata cccactatc agaaaaaaa aaaaaagct tigtgtccc ttattgggg agataaaca gatatggtt</p> <p>METNSLPNTN ISGTPAVSA GYLFDIITY LVFAVTVLG VLGNGLVWV P Homo sapiens</p> <p>AGFRMTHVT TISYLNLA VA DFCFTSTLP FMVRKAMGGH WPFGWFLCKF VFTIVDNLFS GSVFLIALIA LDRVCVCLHP VWTQNHRTVS LAKKVIIGPW VMALLLTLP IIRVTVPGK TGTVACTFN SPWNTDPKER INVAVAMLTV RGIIRFIIGF SAPMSIVS YGLIA TKHK QGLKSSRPL RVLSFVA AF FLWSPYQVW ALJATVRIRE LLQGMKEIG IAVDVTSALA FFNSCLNPML YVFMGQDFRE RLJHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p> <p>atggaacca acttctcat tctctgaat gaactgag aggtgtcc ttgagctgt ggcacacag tctgtgat ctctcatg A ctagtccag gagtacatt tgtctggg gtctgggg atggctgt gactgggt gctggatc gtagacag</p>	
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>ccagaccta gaactaocca gagcaagacc acagctgggt aacagtccag gagcagacaa galgagaca aatctctc tcccacagaa catcttgga gggacacctg ctgaictgc tggtaictc ttcttgata tcaactta tctgtatt gcagcacct tigtctcgg ggtctgggc aacgggcttg tgaictgggt ggcctggatc cggatgacac acacagtac caccatcgt tacctgaac tggcgtggc tgaactcgt ttacctcca ctgttcatt ctacatgt cggagagtc ttctgacg cctcatig tctggaccg ggcgtgttc tgrcaaat cgtcttacc atagtggaca tcaactgt cggagagtc ttctgacg cctcatig tctggaccg tgrgttgc tctgcatoc agctggacc cagaaccacc gcaccgtgag cctggcaag aagtgatca tggggcctg gggttggt ctgctocca catggcagt tatcattgt gtagctacag taacttgtaa aacggggaca gtagctgca cttaact ttggccctgg accaagacc claaaagag gagaaatgt gccgttgca tgttagcgt gagagggatc atocggatca tcattggctt cagcgacacc algctcatg ttgctgicag ttatggctt atggcctt atggcctt atggcctt atggcctt gtcgtccctt acgggtctc tctgtgtc cagcagcct ttctctgc tggccccc atagccat atagccat ggccttata ggcacagca gaatccgga gtaatgcaa ggcagtaaa agaaatgg tatgtcagtg gtagtgaca gtagctgac cagccctc cgtctcaac agctgctca acccatgt ctatgttc atggccagg acttcaggga gagctgac cagccctc cgtctcaac ggagaggggc ctgaccagg actaocca aaccagtag acagctacca attactt acccttga gaggtggagt tacaggcaaa gtagaggagg agctggggga cacttcag cctccagtc cagctctgc tcaactgag ttggctgag cacaggcatt tctgtctat ttaggata cccactatc agaaaaaaa aaaaaagct tigtgtccc ttattgggg agataaaca gatatggtt</p> <p>METNSLPNTN ISGTPAVSA GYLFDIITY LVFAVTVLG VLGNGLVWV P Homo sapiens</p> <p>AGFRMTHVT TISYLNLA VA DFCFTSTLP FMVRKAMGGH WPFGWFLCKF VFTIVDNLFS GSVFLIALIA LDRVCVCLHP VWTQNHRTVS LAKKVIIGPW VMALLLTLP IIRVTVPGK TGTVACTFN SPWNTDPKER INVAVAMLTV RGIIRFIIGF SAPMSIVS YGLIA TKHK QGLKSSRPL RVLSFVA AF FLWSPYQVW ALJATVRIRE LLQGMKEIG IAVDVTSALA FFNSCLNPML YVFMGQDFRE RLJHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK</p> <p>atggaacca acttctcat tctctgaat gaactgag aggtgtcc ttgagctgt ggcacacag tctgtgat ctctcatg A ctagtccag gagtacatt tgtctggg gtctgggg atggctgt gactgggt gctggatc gtagacag</p>	

(FPR2)

633 190824 Formyl Peptide NP\_002021.2 P Homo sapiens  
 Receptor-like 2  
 (FPR2)

cacagcgaac accatcgtt acctgaacct ggccctagct gactctctt tcatggccat octacattc cgaatggctt cagcggccat  
 gagagaaaa tggccttgg cgtcattctt alghaagta gttcatgta tgalapcat caactgttt gtcagtgctt acctgatcac  
 calcattgt ctagccggct gatttgg cclgcatcca gcttggccoc agaaaccalag caccatgagt ctagccaaaga  
 gggtgatgac ggagacttgg atttaccac tagtcttac cttaaccat tcatctt ggactaacat aagttactacg aatgggggaca  
 calactgtat ttcaacttt gcatcttgg ggagacttgg tgaagacttgg ttgaacttgg tcatcattt ggccaaaggct ttctgatcc  
 tccattcat tattggctt acggggccca tgcacat caccgttgc tagtgggaca tggcttggcca aattcacaga aaaccacaga  
 ttaaalccag ccgttccctt cgttcttgg cgttcttgg ggtcttctt tcatctt ggttccctt tgaactaat ggcatctaa  
 tggcagcttgg gctcaaaagg atgtgttaa atggcaaaata caaaatcatt ctgttcttga ttaaccacac aagcttcttgg gctttttta  
 accagcttgg caaccacatt cttaagctt ttatgggttga taacttcaa gaaagacttga ttggcttctt ggccactagt ttggagagggg  
 cccttgaactga ggtccctgac ttagccccaga ccagcaaacac acacaccact tctgtctcac ctccttggaga gacggagnta  
 caagcaatgt ga

634 190824 Formyl Peptide NP\_002021.2 P Homo sapiens  
 Receptor-like 2  
 (FPR2)

METNFSPLN ETEEVLPEPA GHTVLWIFSL LVHGVTFVFG VLGNGLVIWV  
 AGFRMTRTVN TICYLNLA DFSAILPF RMVSVAMREK WPFASFCLKL  
 VHVMDINLF VSVYLITIA LDRCICVLHP AWAQNHRTMS LAKRVMTGLW  
 IFTIVLTPN FEFWTISTT NGDTYCFNF AFWGDTAVER LNVFITMAKV FLILHFIIG  
 TVPMSIITVC YGIIAAKIH RHMKSSRPL RVFAAVVASF FICWFPYELI GILMAVWLKE  
 MLLNGKYKII LVLNPTSSL AFFNSCLNPI LYVFMGRNFQ ERLIRSLPTS LERALTVPD  
 SAQTSNTHIT SASPPEETEL QAM

634 190824 EMR2 Hormone NM\_013447  
 Receptor

cggagacagg acagccgtt cccactact cttcccttgg cgtctcttgc cggcagctca gcttggaaaca tggggaggccg  
 cgtcttctc gcttttctg cacttcttgg ctagcttgaat ctagccgggag ctgaaacacca ggaacttccagg ggtcttggcc  
 gggttggccoc ttaggactoc tgggttga atggccacgc ctagcttgc tgaacttgg tgaacttctt ttcttgaatc  
 alcaaccaccc ccagtgagac ttgttgaagac alcaacagagt gttgcaacact gttcggaaagt tcatcttggaa aattcttggaa  
 ctgttgggaac acagtgaggga gtttgaagctt cgttggcagc ctagggaatag agcttggctt tgggggcaaaa acatttcaaga  
 algaagagcga gaaacaggtt caagagtgagg agaaatgta gcaagaaacca aggtcttggta aaggttcttgg cacccttggc  
 aacaccccttgc gcaagctacac gttgccaagctt ctagcttggct tcaagcttcaa accgttgggac ccggaagcttct gcaagagat  
 gaalgaatgc acctccggac aaaaaccatg ccacagcttcc accacttgc tcaacaactt gggtcagctat cagttgcccgt  
 gcccaccgggg ctggcaaccg altccgggggt cccccaatgg cccaacaaat accgttcttgg aaagatgggaa cgaagtgagg  
 tccggggcagc alcaagtgga cagcttccacc gttcttcttca acacggggcgt ttcatatagc tgcagcttgg ccgccaggcctg  
 gaagggccaga caggggaatcc cgaataaacca aaggggacact gttcttgaag atatgactt ctccacttgg accccggcccc  
 ctggaggttcca cagccaagctt cttccgat tcttggaca aagttcagagac ctggggcagag actacaaaggcc aggttcttggcc  
 aataacacca tccagagcat ctacagggcg ctggagagagc tggcttggggc ccttgggggac cttgggggac tggcccgtt  
 acagcagcac ttttgggcca gttacatgtt gggaagggcca gaggatgttcc ttagggggtt gaggcaagac ctttccaatg  
 ggcttggga cttagcttcc cttgcaaggca cagaaatgtt cttggaggggtt cagaaagggcag tagaacagggag tttcacttgg  
 agaaagaaatc aggtcagtgga gcaagcttga tggaaatcag cacaagaaatc tggggggcga gggcccttctg tgggttggccct  
 tttcttccatt ccaagggatgg gcaagttgtt gggttggggcc ccttcttgggtt tggaaacttga gaaagcagatg ctcttggcag  
 agaaacacca gggttggctt cagggaagggt ccccatctt gttctcagat gttgacttctg ctttttggag caaacagac  
 acccaaaacc ttagcttcccc agttacatc accttctcc accgtttagt gttccgggga cagaaagggtt tcttgggtt  
 ctggggagcat gggaaggaatg gaatgggttga ctggggggcc acagggcttga gcaaaagag caccagagac accagcacca  
 tcttggccgttgg caaccacatg agcagcttgg ccgttctcat ggcccaactac gaaatggcagg agggagagatcc cgttcttgaat  
 gtcatcact acatgggggtt gagggttctt ctgttgggtt tcttcttggc ggcccttact ttttcttgg gtaaaaggccat cagaaacac



49/448

635	190948	EMR2 Hormone Receptor	NP_038475.1	<p>           agcaactcac tgcactcga gctctgctc tgcctctcc tggccaccct cctctctcc gttggcaatg atcaaacgg            acacaaggc ctgtgtcca tcatgccgg taactgcac tatcttacc tggccaccct cacttgatg ctgtggagg            cctgtacct cttctact gcaagggaacc tgaagggtgt caactacta agcatcaaca gattcaagaa gaaagtcatg            ttccctgtgg gctacgggagt ccaagctgtg acagtgccca ttctgcagc ctccaggcc cactttatg gaacacctc            ccgtctgtgg ctcaaacca gaaagggaatt tataaggggc ttccctggag ctgtctgag cactctct gtaatttag tctctct            ggtgactct tggatttga aaacagagact cttctctc aatagtaga tttccacct ccggaacaca aggtatgctgg            cattaaagc gacagctcag ctgtcatcc tgggctgcac gttgtgtctg ggcattctg aggtgggtcc ggttgcocgg            gtaaggct accttcaac calcatcaac agcttgcaag gttgtctat cttctgtgtg taactctcc tcaagocagca            ggtccgggag caataaggga aatgttccaa agggatcaag aaattgaana ctgagtctga gtagcacaca ctctccagca            gttctaggc tgaacctcc aaacccagca cgtttaacta gaaatact ctgaataaga tcttctct tggccgttgg            aaaaatctga caactttga gccatctaga ggggaaagaa aagacttgt tctgtgtt tcaagaaat caccatgca gcaatatga            ggaattatg gaaggcgtg ttggcatca attctgcag aaaccggaaa tcttccagc cctgcaatg gctatcaaa            ctctcagcat atggagggcc agctgtggcc catacttgg tcaactgaa gcacaalatt tatgaagcta tagaacgtta agacctt            cacaagctct ccttctaca aagactctc caaatctta aatgaagcag gaaacaacag ctgaaggag ttcataccg            acaacatg aaggactag aatgtcaca ccagatctg gattcttaa tttttgt tttttgt tttttgt tttttgt tttttgt            ttgatttt agcatgta aaatatga ttactcac atagatcaag agagacacag cctgtcct catgagct ttgggggaaa            atgaagggc tctgtcagct agatttga cagaagccga aattctaga aatcaggtt ctactctag gcaattgaag tataaactat            tttaaaaa ctgtctct tcatctac         </p>	P	Homo sapiens
636	190955	Leukotriene B4 Receptor BLT1	NM_000752	<p>           MGRVFLVFL AFCVWLTLP AETQDSRGCA RWCQDSSCV NATACRCNP            FSSFSEIIT PMETCDDINE CATLSKVSCG KFSDCWNTEG SYDCVCSPGY            EPVSGAKTFK NSENETCQDV DECOQNPRLC KSYGTCVNTL GSYTCQCLPG            FKLPKPEDPKL CTDVNECTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPIPG            SPNGPNNTVC EDVDECSGQ HQCDSSIVCF NTVGSYSRCR RFGWKPRHGI            PNNQKDTVCE DMTFTWTPP PGVHSQTLR FDKVQDLGR DYKPLANNT            IQSILQALDE LLEAPGDLET LPRLQHCVA SHLLDGLDGV LRGLSKNLSN            GLLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPPGS            VVGL VSIPGM GKLLAEAPLV LEPEKQMLLH ETHQGLLQDG SPILLSDVIS            AFLSNNDTQN LSSPVTFHS HRSVTPRQKV LCVFWEHGQN GCGHWATTGC            STIGTRDTST ICRCTHLSSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLLC            LLLAALTFLL CKAIONTSTS LHLQSLCLF LAHLLFLVAI DQTGHKVLCS            IAGTLHYLY LATFTWMLLE ALYLFTARN LTVVNYSSIN REMKKLMFPV            GYGVPATVA ISAAARPHLY GTPSRCWLQP EKGFHWGFLG PVCAIFSNNL            VLFLVTLWL KNRLSSLNSE VSTLRNTRML AFKATAQLFI LGCTWCLGIL            QVGPAARVMA YLFTIINSLQ GVFIIFYCL LSQVYREQY KWSKGIRKLL            TESEMHITLSS SAKADTSKPS TVN         </p>	A	Homo sapiens



Receptor 1 (TA1)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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641	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	<p>gocggaagc atttggagc ggcaccigat tttaacct ttgtctg tttaaggga atcctaagc caaaacacca ggaactigaa  gaaactigaa actggcggt tttaataacc ggtaattta ttccacaca gttgtttt gaanaagagc ttccataag tataacctt  tccacttca tctgtctata tatgaagcgc ctggagtgig calgaaccaaa aggaataaac attgaagaag gaanaacata  tgtaagaagt atttgaaga gtaacctgic ttgatgag ctctctac cattagtt ttgtatata cccgggggca gtagagccct  aggtgigccc accagataga gttgccalla agacctcaag ccccttatt tttaataaa gttcttcta aatgggtag  aatcttagcc agtgaagaaa aaaaatttt ttgtctctt ttuttcga ctctaaagc tgaanaatgg cgttggagtg tatagtgaaa  attttccagt ttgaataag atggcagag cagcacigc aatttgaaa acaataagc tgaatactia tttaggtac cgtttacat  tttctagc atgcacacti gttctaac tcauttga accaatttt ttgcttag aatggtagg cagcttgaa cattctgtac  tgtaatggtt gctaaagaaga atagctct ctgttttc ttacattt aaatattc atgacacag atataatna acaciaaaa  taccatgact gcalagctaa tatagctgc tatgcatgc tctagatgc tatgaactat tgggcatgig gtatctgaa gctatacccg  ttagacaagg atattttact tcttccagac accagaagaaga atggcttca atattgaa aagagacaca ggaacacctc tggctacct  gagttctcc tgcctgacc aattatgag aaagctccca gttgggacti tatctacaa gttggaatcac agtcaagagc gatcaaat  atggttggct cagcaagcc agctgigctc tttaagggti taaacaagcc acacgttataa taaacacgti cataatag gaaaggtica aatgggaag  tattaccg acatttaaca tcaatagt atagtgtgaa ggaaggtataa taaacacgti taaatagtt gaaatgcaaa atgtgtgaa  tgttcaaaa calatttt gaggtgigc atattctc ttgtttact aaattttt agaaatatt gaaatgcaaa atgtgtgaa  atcccttat caaattaaa tgggaagaaa gtaatttaa taattttaa taatcalag tcaatctcti gacttctac cacatnaat  ctgggcccac acagctcag ttaactgcat aattcagga caaaacagc tggctgtgti gcagccctgg gcaatttcag  ccaagacatt aggcaccti gttgacac tgaataatga tgggaatgg gacatgtaa ggaanaacaaa tatgtcac accaacaic  agctgtcatt tttaacti atcccttgg tgcagcac atttctcti tactacag ttacatgti cacatttcc ttgattcaaa  tattaaagt cagaataaaa aaaaaaaa aaaaaaaa aaaaaa</p>	P	Homo sapiens
642	191168	P2Y12 Platelet ADP Receptor	NM_022788	<p>mtnssststs sttqgslLLL CEEESWAGR RIPvSLLYSG LAIGGTLANG  MVTLVSSFR KLQTSNAFI VNGCAADLSV CALWMPQEA V LGLLPTGSAE  PPADWDGAGG SYRLRGGLL GLGLTVSLLS HCLVALNRYL LITRAPATYQ  ALYQRRHTAG MLALSWALAL GLVLLPPWA PRPGAAPPRI HYPALLAAAA  LLAQTALLH CYLGIVRRVR VSVKRVSVLN FHLHQHLP GC AAAAAFPGA  QHAPGPGGAA HPAAQAPLPP ALHPRRQRRL SGLSVLLC CVFLLATQPL  VWVSLASGFS LPVPWGVHAA SWLLCCALSA LNPLYTWRN EEFRRSVRSV  LPGVGDAAA AVAATAVPV SQAQLGTRAA QQHW  ggctgcaata actactacti actggatata tcaaaccti cagaatcaa cagtatcag gtaaccaaca agaaatgcaa  ggcgtcgaca acccaactc tgcgcctggg aaacacagc tggcaccag agactacaaa atcaccagc tctctccc  actgctctac actgtctgti ttgttgg actatcaca aatggcctgg cgaigagat ttcttcaa atccggagta aatcaact  tattatttt ctlaagaaca cagtatttc tgaattctc atgattctga cttttcatt caaatctt agtgaigcca aactgggaac  aggaacctg agaaatttg tggtaagt tacctcgc atattttat tcaaatga tatcagrat tcaatctgg gactgatac  tatcagtc taccagaaga ccaaccagcc attnaaaca tccaaccca azaatctcti gggggctaaag atctctctg tttctatc  ggcaltcag ttctacti ctggctcia catgattcgt accaagcgc agcagagaga caagaatg agaaatgct ctctctaa  atcagaatc ggtctagcti ggcaatgaat agtaattac atctgtcaag tcaatttgg gataattc ttaattgta ttgtatga  tacactcatt acanaagaac tgaaccgc atactgaaga acgaagggg tggtaaaagt cccagagaaa aaggggaacg  tcaaatgt cattatcatt gctgtattct ttattgti tttcttct catttggcc gaattctia caccctgagc caaacccggg  atgtcttga ctgcactgti gaaalacti tttctatgt gaaagagagc actgtgtgti taattctt aatgtcagc ctggatcgt  tcatctatt ttcttggc aagttctca gaaatctcti gataagtag ctgaatggc ccaattctgc aactctcig tccaaggaca</p>	A	Homo sapiens

643	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	P	Homo sapiens	<p>atagagaaaa agaacaggat gggtggacc caaatgaaga gactccaatg taacaaaat aactaaggaa alatticaat ctcttggc tcgaactcg taaagcaaa ggcataaga aaaaataaa ctgacgaaga agcaactaag taaalaalaa tgacliaaa gaaacagaag atacaagaag caattttcat ttaccttcc agatagaana gctacttaa aataagaana actaactaa actgtagctg tattagcagc aaaaacaaag ac</p> <p>MQAVDNLTSA PGNTSLCTRD YKIQVLFP LYTVLFFVGL ITNGLAMRIF FQIRSKSNFI IFKNTVISD LLMILTFPEK ILSDAKLGTG PLRTFVQCQT SVIFYFTMYI SISFLGLITI DRYQKTTTRFF KTSNPKNLLG AKILSVVIWA FMFLSLPNM ILTNRQPRDK NVKKCSFLKS EFGLVWHEIV NYICQVFWI NFLIVVCYT LITKELYRSY VRTRGVGKVP RKKVNVKVI IIAVFFICFV PFHARIPYT LSQTRDVDC TAENTLFYVK ESTLWLTSLN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRKKE QDGGDPNEET PM</p>
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	A	Homo sapiens	<p>atggigaata atttcccca agctgaggct gggagcctg gttacaagaa cgtgaacgaa tcttgcata aaactccita ctcggcaggt cctcgatcta tctciacgc cgtccttggc ttggggcgtg tgcgggcagc gtttgaac ttactgtca tgaigtat ccttaccic aaacaacgic acacacctac aaactttcgt atggcgtgc tggcctgtgc tgaacttctg ggggagica cigtgatcc cttcagaca gggagcgtg tggagcgtg ttgtactt ggggacagt actgaat ccatcaltg ttgacacat ccttcgtt tgctcttia ttacttatt gcgtatcic tgtgataga tcatgtcgt tactgaacc tctgacctat ccaaccaagt ttactgtgic agtticaggc alatgcatg ttcttccgt gttcttcti gtcacataca gcttttcat cttttacagc gggagccaacg aagaaggaat tgagaataa gtagtgcic taactgtgt aggcctccac tgaatcaaaa cgggtccia cttgtttc tttattct tataccaat gtcgcaatgg ttttataa cagtaagata ttgtgtgg caagcatca ggcctaggaag atagaagaia cagcagcca agtcagatcc tctcagaga gttacaagaa aagaagaga aagaaggcgc caaaacctg ggaatgcta tggcagcat tctgtct tggctacct accctgtga tgcagtgtg gattgtata tgaatttat aactctct tatgttatg agatttatg ttgggtgtt tatataat cagctatga cccctgtat taltcttct ttaccatg gtttgggaag gcaataaac ttatgaag cggcaaggc ttgaaggcgt atcgcaac aactaatta ttctgaag aagtagagac agatlaa MVNFSQAEA VELCYKNVNE SCIKTPSPG PRSILYAVLG FGAVLAAGFN LLVMIALHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF GDSYCKFHTC FDTSCFASL FHLCCISVDR YIAVTDPLTY PTKFTVSVS GICVLSWFFS VTYSFIFT GANEEGIEL VVALTCVGGC QAPLNQNWVL LCFLLFFIPN VAMVFIYSKI FLVAKHQARK IESTASQAQS SSESYKERRA KREKAAKTL GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVYELVWCV YVNSAMNPLI YAFFYQWFGK AKLIVSGKV LRTDSSTTNL FSEEVETD</p>
646	191196	G Protein- Coupled Receptor GPR80	AF411109	A	Homo sapiens	<p>atgaatgagc actagacta ttagaat gcttctgatt tcccagatta tgcagcgtc ttggaaat gcactgatga aaacatocca ctcaatgac cttaactccc tttattat ggcallatct tctctgtggg attccaggc aatgcagtag tgaatccac ttactttc aaaatgagac ctggagaag cagcaccatc attatgcta accgtgccc cagatgctg ctgtaicga ccagctccc cttctgatt cactatg ccagtggga aaactggac ttggagatt tcatgttaa gttatccg ttaactcc attcaact gtatagcagc atctcttcc tcacctgt cagcatcic cgtactgtg tgaatcaca ccaatgagc tctttcca ttcaaaaac tcgatgicga gttgtagct gtcgtgtgt gttgatcat tcatgttgc cgtcttcc gttgacotc ttgatcat caaccaacag gaccaacaga tgcgtctgic tgcacttacc cagtctggat gtaactcaata ctatgaag gttacaacgt ttgtacagct caactatt ctgcttccc ttgtgtatg tgaacttgg ctataccag attatcaca ctctgacca tggactgcaa actgacagct gctttaaaga gaaagcacga aggttaacca ttcttact ccttgcatt ttactgt ttatccct ccaatctg agggctatc ggatgaaic tcgcttctt tcaatcagtt gttccattga gaatcagatc catgaagct acatgttct tagacattg gctgtcttga acacttgg</p>

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1	<p>taacctgtta ctatatgttg tggtagcaga caactttcag caggctctgt gctcaacagt gtagatgcaaa gtaagcggga  accttagca agcaagaata atagttact caaacaaccc ttag</p> <p>MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG  NAVVISYTF KMRPWKSSSTI IMNLACTDL LYL TSLPFLI HYYASGENWI  FGDFMCKFIR FSHFNLYSS ILFL TCFSEF RYCVIHPMS CFSIHKTRCA VVACAVVWII  SLVA VIPMTF LITSTNRNTR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT  IIHTLTHGLQ TDSCLKQKAR RLITILLAF YVCFLPFHIL RVIRIESRLI SISCSEINQI  HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP</p>	P	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214	<p>tccttggccc ttataaalg actaatc tcaagctc tgaattctc tctgtaaaa caggggcgggt aataacaca taacaggctg  gcatgaaaa tcatgaaaca tgcagcaggt gctcaagctc tgttttgt tccaggcgca ccagtgaggg tttctgagc atggatocaa  ccaccggc ctggggaaaca gaagatgaca cagtgaatag aatgaocaa gccctctc tctttgttg caaggagacc  ctgacccgg tctctgtat cctttcatl gccctgttg ggcctgttag aaacgggttl gtcctaggc tcttgggctt ccgcatggc  aggaaagcct tctctgcta cgtctcagc ctggccgggg ccgactctt cttctctg tccagatta taattgctt gctgtacct  agtaactct tctgtccat cttcatcaat tccctagct tcttccac tgtgatgacc tgtgcttacc tgcagggctt gtagcatgctg  agcacctgca gcacggagcg ctgctgttcc gctctgtggc ccacttggtg tgcctggcc cggccacagac acctgtcagc  ggctgtgtgt gctctgtctt ggccctgtc cctactgttg agcatcttg aagggaaagt cgtggcttc ttattagtg atgtgactc  tgggtgtgtt cagacattg attatcac tgcagcgttg ctgatttt taltcatlgt tctctgggg tccagctctg cctgtctgtt  caggatctc tgtgttcca ggggtcttgc actgaccagg ctgtactga ccatctgtt cacaagtctg gttctctcc  tctgtggctt gcccttggc attcagtggt tctaatatt atggatctg aaggaatctg atgtctat tttcatatt calccagtt  cagttgtctt gctatctt aacagcagtg ccaacccat catttactc ttctggggct ctttaggaa gcagtgggcg cgtcagcagc  cgatcttcaa gctgctctc caggaggctc tgcaggacat tgcctggag gctacagtg aagatgctt ccgtcaggcg  acccggaga tgcagagaag cagctgtgtg tagaagtaga cagctcttacc ttcactcaga tatatggc tttagagggc  aacttggcc ctgtctgtt gatttctga actttcag tctgattt aaaaacaga agagaagctt tgtaggagt aagttagaca  MDPTTPAWGT ESTTVNGNDQ ALLLCGKET LIPVFLIFI ALVGLVGNFG  VLWLLGFRMR RNAFSVYVLS LAGADFLFLC FQINCLVYL SNFFCSISIN  FPSFTTVMT CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC  VLLWALSLL SILEGKFCGF LFSDGDSGWC QTDFDITAAW LIFLFMVLCG  SSLALLVRIL CGSRGLPLTR LYL TILLTVL VFLLCGLPFG IQWFLILWIW KDSVDVLFCHI  HPVSVVLSSL NSSANPIYF FVGSFRKQWR LQQPLKLAL QRALQDIAEV  DHSEGCFRQG TPEMSRSSLV</p>	A	Homo sapiens
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	<p>tcatalact gacattcti ttggagcaa agtttagat acactgttg catttccct gcatatgtgt gcaaatgctt ggtcctgag  altttgtcti ttctgcagg ttgcagacti gccactagag ctgggattgg tcatgtgac attgctgac atggagcca gtagagcagg  actcaggca algctgtcta cactatggga agaataactg tagatcatct ttagaaaggc agactgttg ttaactctt gcttaacaat  aataacatag catgtggga tagatgtgca atacaggtat ccatagtag ataatatag gacataatc tccacagctg gtaatat  gccaaatgtg tagcatagaa tagggatgaa tgtatccaa gctatgaggt aatgtagcat gccaaatgta atgaattgg  cttcattgta aticatat ttgcttga aagcaaatat gaagcaaat aagggcaggga tggcaatgta gccacagcatg  gtggcaaatg caagtatgga tccctctca cactccagga tgaatgacti gggtcaagtag acatitacct ctacagtagg  tgtctgcaag attagccaga gttgtgcaat gacaactgg atggcgtg aagttagat aataagatc ggtctataga  ggcactttag aatttctgt aattgggaa caagctgaa ggctagcaaa attttag acttgcag aatgcaggag  atgcaagag taagctcac tccaaacatt gttgtccttg ttatcatgt gaagtctgt ggttctcaa tgaagaagct cgtgtctgga</p>	P	Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359		A	Homo sapiens

651	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199 719	P	Homo sapiens
<p>aaattgaggga aatgacagag aagatcacaca tagcagagctc ttaatccccc ggaatgatttc acaacagggg tgctcaggtt tcttgaaat attatgcaaa caacagaaac aaatattgati cccagtaggg agagatggatg gccaaggaggt catccaggtt gagatattcc acttctttt caaagacacat agtgctccta acagggggccc agttaggttt gttgttgcat aaaaaggcagt gaggcalatc t</p> <p>QTLAMHSIE MINNSTLLPG VKLGYEYDIT CTEVTVAMAA TLRLSKFNC SRETVEFKCD YSSVMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH L IQKSGWNWIG IITDDDDYGR LALNTFIQA EANNVCIAFK EVLPAPFLSDN TIEVRNRITL KKIILEAQVN VIVVFLRQFH VFDLFNKAI E MNINKMWIAS DNWSTATKIT TIPNVKKIKG VVGFAFRGN ISSFHSFLQN LHLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHSIQLA V FALGYAIRDL CQARDQPNP AFQPWELLGV LKNVFTDVG NSFHEDAHD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTRSQH ICCYECQNCP ENHYTNQIDM PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGIIIFVL VVGIIITRNL NTPVVKSSGG LRVCYVILLC HFLNFASTSF FIGEPQDFTC KTRQTMFGVS FTLCISCILT KSLKILLAFS FDPKLQKFLK CLYRPILIF TCTGIQVVIC TLWLFAAPT VEVNVS LPRV IILECEEGSI LAFGTM LGYI AILAFICFIF AFKGYENYN EAKFITFGML IYFIAWITFI PIYATTFGKY VPAVEIIVIL ISNYGILYCT FIPKCYVIIC KQEINTKSAF LKMIYSYSSH SVSSI</p>					
652	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	NM_032571	A	Homo sapiens
<p>tttctgagc taggaaggt ggttgcttta cggcacagta gagaagcttcc agggctgggt ggcgfggggat acccgtaacca cagaanaigca gggacattg cttcttcag gctctgctt tctgtgagc cttgttgag cttgtgactca gaaacccaaa acttctgtg claaagtgccc cccaaatgct tctgtgtgca ataactca cttgcacctc aaacatggat atactctgg atctggggcag aaactatcca cattccctt ggaagcatgt aacgacattat algaaatgtaac accaactat agtattat gttgatttaa cgtgtgtgtt tacaatgctg aagggaaagttt ctactgtcaa tgtgtccag gatatagact gcaatctggg aatgataaat tcaatlaatic caatgaaac accgtgcagg acaccactc ctcaaaagaca accgaaggcca ggaagaggt gtcacaaaggtt gttggacaaat ttgggtcact tctaccaat cagacttat ggaagaaaca aggggaagaca gaaatctcat ccacagctac cactatttc cgggagtggtg aatcgaaagt tctagaaact gcttgaaag atccagaaaca aaagtctc'g aaatccaaa ac-gataggtt agctatgaa actcaagcga ttacagacaa ttgctctgaa gaaagaaaga cattcaactt gaaactgtccaa atgaaactcaa tggacatccg ttgcagtgac atcaatccagg gaaagacacaa aggtcccaagt gccaatgctt ttatctata ttcttctt ggaacacatca taaatgcaac ttttttgaa gaaagtgata agaaagatca agtgtatctg aaacttcagg ttgtgtgtgtc tgcatttgaa cccaagaggt acgtgtctct ctccaaagtct gttccagca ctttccagca cgtgaaagt accccagta ccaaaaggt cttctgtgtc tactgtgaa gacacagggca gggcagccag tgggtccagg algtgtgtt cttgtatcac gttgaaacaagt gtcacacacat gttgaaatgg agttacactgt ccagcttgc tgtctgtatg gctctgacca gccaaggaaga ggaatcccggt cttgactgtca tcaactact ggggtgtgac gttctctgc tgtgtctct cctgtgtgtt cctgtgtgtt ctaactttt tctgtgtgaa agtccatccag aacacagca cctcactgtca tctgcagctc tgcctgtccc tcttctgc ccactctc tgcctgtgc ggaatgagc aaactgaaacc aaggtgtgtgt gttccatcat cgtccgtgtt ttgcataic ttaactgtgc cgtcttacc ggtcttgc tgcatttgca cttctgtc tactgtgaa ggaacctgac agtgtgtcaac tactcaagca tcaataagat caigaaaggt atcaatgtcc cagtcgggcta tggcgttccc gctgtgtatg tggccatttc tggacctccc tgggtccacc ttatgtgaac tgcgtgtatgca tgcgtgtccc actgtgacca gggattcag tggagttccc ttggccaggt cttgtgtcatt ttctgtcga attatatt gttattctg gttcttttga ttgtgaaag aaaaacttcc tccatcaata gttgaaaggtc aaacatccag aacacaaagga tgcgtgtt caaagcaaca gttcagctct tcaatccggg cttgcacatgg tgcctgtgtt gttgaaaggt ggttccaggt gccaaggtca tggcctactc ttcaacatc</p>					

56/448

Homo  
sapiens

P

NP\_115960.1

653 193511

EGF-Like  
Module-  
Containing  
Mucin-Like  
Receptor EMR3

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MQPPLLPGL CFLLSLFGAV TQTKTSCAK CPNASCNN THCTCNHGYT  
SGSGQKLFTE PLETCNDINE CTPPSVYCG FNAVYNVEG SFYCQCVPGY  
RLHSGNEQFS NSNENTQDQT TSSKITEGRK ELQKVDKFE SLLTNQLWR  
TEGRQEISST ATTILRDVES KVLETALQDP EQKVLKQND SVAIETQAIT DNCSEERKTF  
NLNVQMNSMD IRCSDIQGD TQPSAIAFI SYSSLGNIN ATFFEEMDKK  
DQVYLNQV V SAAIGPKRNV SLKSVTLTF QHVKMTPTK KVFCVYWKST  
GQGSQWRDG CFLIHVNKSH TMCNCSHLS FAVLMALTSQ EEDPVLTVIT  
YVGLSVLLC LLLAALTFL CKAQNTSTS LHLQLSLCLF LAHLLFLVGI  
DRTEPKVLC SIIAGALHYLY LAFTWMLLE GVHLFLTARN LTVVNYSSIN  
RLMKWMFPV GYGVPATVA ISAAWPHLY GTADRCWLHL DQGFMSWFLG  
PVCAIFSANL VLFILVFWL KRKLSSLNSE VSTIQNTRML AFKATAQLFI  
LGCTWCLGLL QVGPAAQVMA YLFTIINSIQ GFFILVYCL LSQVQKQYQ  
KWFREIVKSK SESETYTLSS KMGPDSPSE GDVFPQVKR KY  
KHAYICLAAI WAYASFVTTM PLVGLGDYVP EPFGTSTCLD WWLAQASVGG  
QVFLNLF CLLLPTAVV FSYVKIAKV KSSKEVAHF DSRHSHVL EMKLTKVAML  
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QVIDYKFACC QTGLKATKK KSLGFLRLHT VTVRKSSAV LEIHEEV  
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ggcgggcgagg ccggggcggt agtctacgc ctgggggac tcaagaaag ccgtctgctg gggatgtca gcatcgacc

Homo  
sapiens

P

CAC21687.1

654 193516

G Protein-  
Coupled Receptor  
dJ402H5.1Homo  
sapiens

A

NM\_001407

655 193524

Catharin EGF  
LAG Seven-Pass  
G-Type Receptor  
3 (CELSR3)





[illegible]

[illegible]

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	gcaaaaggag cagaacaag ggaattcaag accagaatg tagtgccac tgcctctat gttacagga tctcctgg ccctaggcac ctggctgca ggaagtact cctcttact tcccttaaa agggaaaaat gactgtacg accctgtca caaaactct acttggta ttgtctgc tgcacgaac tgaagactt aaaaattgt tactgtttac aagtcacat tcaaaaaatg ttttaacti gttacaact caaaacttg agttttac ttgtttac gtagataat tttttctt tttttccaag tgaaggtag ggaagtgagg agaggagact ggagagacca cctgtgagga cctgacctg gccatctga ggggtttct aaacccagg tctccaggc cgaaggtcag ccttgagtc cgttaacag cagatccaga agactgtgag agtaggcgic cttaaccac gggggagagt ggcctgctgag ggcctggggg tggctgtgc agacacctc tcaccacca cccatgcat actctggga agcagcttc tggagatta gaaattctac ttccctgact ggagctaat cccaccagc aggacocaaa ctctcttiac cgagaaggac cccagctct gaagggtcga gtgacctgt ggggggtgga ggggtcttt actagtctt aggtttgta galccctc tctgggttc cctctctca gccacgggc cctttctt gctgtgtaa attgtccgt gaagccggc tctgttttg gaataaact ctatagaaa caaaa MMARRPPWRG LGERSTPILL LLLLSLPLS QEELGGGGHQ GWDPLAATT GPRAHIGGGA LALCPSSGV REDGGGLGV REPfVGLRG RRQSARNSRG PPEQPNEELG IEHGVQLGS RERETGQPG SVLYWRPEVS SCRTGPLQR GSLSPGALSS GVPGSGNSSP LPSDFLRHH GPKPVSSQRN AGTGSKRKRVG TARCCGELWA TGSKGQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCRFLPQR PGP RPPLPA RPEARV TSA NRARFRRAAN RHQPQYNY QTLVPENEA GTA VLRVVAQ DPDAGEAGRL VYSLAALMNS RSELEFSIDP QSGLIRATAA LDRESMERHY LRVTAQDHGS PRLSATTMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFEIDP RSGLISTSGR VDREHMESEYE LVVEASDQEQ EPGRSATVR VHITVDEND NAFQSEKRY VAQVREDVRP HTVVLRV TAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDNDHIPI FVSTPFQVSV LENAPLGHV IHQAVDADH GENARLEYSL TGVA PDTPFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVSVTA VDRDANS AIS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHINITD ANTHRPFVQS AHYSVSVNED RPMGSTIVI SASDDDVGEN ARITYLLEDN LPQFRIDADS GATLQAPLD YEDQVYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAPQ FVASHYTGLV SEDAPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRDLREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFP AE EFVVRVKENS IVGSVVAQIT AVDPDEGPN HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEAREQYVI VVQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNMYV SNRSDTFPSG IIGRIPAYDP DVSDHLFYF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASMLVTVID GLHSVTAQCV LRVVTITEEL LANS LTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSSE ELQEQLYVRR AALAARSLLD VLPFDNVCL REPCENYMKC VSVLRFDSSA PFLASASTLF RPIQPIAGLR CRCPGFTGD FCETELDL CY SNPCRN GGAC ARREGGYTCV	P	Homo sapiens
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DTEAGRCV PGVCRNGGTC TDAPNGGFR CQPAGGAFEG  
SSFV MFRG LRQRFHLTSLSFATVQQSG LLFYNGRLNE  
QVRLTYST GESNTVVSPT VPGGLSDGQW HTVHLRYYNK  
PSKDK VAVL SVDDCDVAV LQFGAEIGNY SCAAAGVQTS  
LGGVNLPE NFPVSHKDF IGCMDLHID GRRVDMAAFV  
KLHFCDSGP CKNSGFCSE WGSFSCDCPV GFGGKDCQLT  
TLSWNFGSD MAVSPWYLGLAFRTRATQG VLMQVQAGPH  
SVTVTRGS GRASHLLLDQ VTVSDGRWHD LRLELQEEPG  
LDFSLFQDT MAVGSELOQL KVKQLHVGG LPPGSAEEAPQ  
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WMPACLGRK APEEARPAP GLGPGAYNNT ALFEESGLIR  
ARSGRTO QDSQGRSY LRDNLVRHG SAADHTDHS  
AMFHRDAGA DSDSDSL EERSLSIPS SESEDNGRTR  
SERLLTHP KDVDGNDLLS YWPALGECEA APCALQTWGS  
ANNQPDPA LTSGDETS GRAQRKGI LKNRLQYPLV  
RAATLGRH AVPAASYGRI YAGGTGSLSPASRYSSRE  
ERLEEAPA PVLRLSRPG SQECMDAAPG RLEPKDRGST  
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DPLPSRP LDSLSRSSNS REQLDQVPSR HPSREALGPL PQLLRAREDS  
LDLSSIL ASFNSSALSS VQSSSTPLGP HTTATPSATA SVLGPSTPRS  
EVRSEGHS  
cca gccctcccaac agcagttggc cctaaagica gaagttggact aacactgggc ccacccggc  
t cctactatca gcacactcc cctggggcg ccatgttcat ttgggctat gcgctact tctgtctg  
tgg tctgttcat cgtgtcaag aacgggaca tgcatactgt caccaatcgt ticalctca

A Homo sapiens

658	193914	Neuropeptide FF 1 Receptor	NP_071429.1	<p>accctggctgt cagtgagcttg ctggggggga tcttctgcat gccacacacc ctgggggaca accctatcac tgggtggccc ttcgacaatg ccacatgcaa gtagagcggc ttggggcagg gcatgctgtg gtcggcttcc gttttcacac tgggtggcca tgctgggaa aggttccgt gcatcgggca cctttccg gtagagctga cctggcgaa ggcgcctgc accatcgccg tcaictgggc cctggcgctg ctaicatg gtcctggc cgtcacgctg accgtaccc gtaggggagca ccaattcatg ggggagccc gcaacggctc clacccttc tactctgt gggagggctg gcccagagag gcatgctgca gggctacac cactgtgctc ttctgcaca ttaoctggc gcccgtggcg ctatcgtgg tcatgtacg ccgcatcgcg cgcagagctt ggcaggccc ggcccggcc cccggggggc agtagggctg ggaacccgga gcatcgcgcc gcaagagcgcg cgtggggc atgctgggca tgggtggct gttctcacg ctgtctggc tggcgctg ggcgtgctg ctgctatcg actacggggca gctcaggcg ccgcatgctg accgtgac cgtctacgg ttccttgg ccgagctg cagcctggc tggccttct aacagcagcg ccaacccat catctacggc tactcaacg agaatccg ccggggctt cagcctggc tccggcgccg cctctggccc cgccgctcg gtagggccaca gtagggctac tccggcgcc ccggggggc tctgacagcg cgggcttctg tgggtggcg ggcagcgac tccgggctg cctctgct ggccctagc agtggggccc ccaggcccgg ccgcttccg ctggggagag gggggggg tccacggc tggccagg aaggcgctg ctgctccac ctgcccctca ccatccagc ctgggatac tga MEGEPSPQPN SSWPLSQNGT NTEATPATNL TFSSYYQHTS PVAAMFIVAY ALIFLLCMVG NTL VCFIVLK NRHMHVTVM FILNLAVSDL LVGFCMPTT LVDNLITGWP FDNATCKMSG LVQGMSSVAS VFTLVAIAVE RFRCIVHPFR EKLTLRKALV TIAVIWALAL LIMCPSAVL TVTREEHFM VDARNRSYPL YSCWEAWPEK GMRRVYTTVL FSHYLAFLA LIVMYARIA RKLQAPGPA PGGEEAADPR ASRRARVVH MLVMVALFFT LSWLPLWALL LLIDYGQLSA PQLHLVTYYA FPFHWLAFF NSSANPIYG YFNENFRGF QAAFRARLCP RPSGSHKEY SERPGLLHR RVFVVVRPSD SGLPSESGPS SGAPRGRPLP LRNGRVAHHG LPREGGCSH LPLTIPAWDI</p>	P	Homo sapiens
659	194319	G Protein- Coupled Receptor FLJ22684	NM_025048	<p>agatactat acttttcc caaacagat aagaagtgt tgaagcaca gatactga ggaagggtc cctcgagtg tgggtgag aglaaatca ccagtcacag actatgca ccgagctgctg tgtcagctc aggggaaatg aaggtggag tgctgtggt catcttct ttaacttca ctgagcca cgggtgctc ctgggggaaa algatgacal caaaacaaaa aagaactca tgggaataa gaaaaacat ctaggccag tgaagaata tcaagctgctg ctcaaggiga cctatagaga ttccaggag aagaagatt tgaagaatt tgaagctc tgaagctc catattatg gtcacatggg ctaattagaa ttatcagagc aaaggctacc acagactga acagctgaa tggagctg caggtacct gtagagcag ctacacctg ttctccct catgctga tcccgagac tctacttc acagctgctg agcatccca agctgtgaat gtcactca caacctcagc cagagtgca attctgga ggaacaaa attggggca ctccaat taalgagag ttacaatg acctttgaa ttacttct gctatact ccaatatgc aatgggaat gaaticaac ttaaaaaagc atatgaga atcaaggt tgaagcgg tcaaggcacc caattcgaa tgcactct gtcgccaag tggagtgca alggcacaat ctgaagctc tgaacctg caacctg ctaccggtt caagagatt cctgctca gctcccaag tagctggaat lacaggcacc tgcaccaca tccagctaac tttttgta ttttttag agacaggggt tcaatgtt ggccacatg gctcaact cctgacctca ggtgactc cggctcggc ccccaaag ctgggattac aggcagagc caccacat ggctagggc cttaaatt ggaagcalt ctaaaactg tgggtcag agtagaacta caaaacata gcaatggggc agaaactga aagtagggcag gtagatcag tgaagtgga tgggaaaaa tgaaggtgg ggaaggggt tgggggtt cgaaggggtt atttctct tcaagcaacta caggagat gtagctcat aatcggagc cagaggtgg gcttgggtt gtagatctt tcaagataa catgtataa tcatgtca aaacccagta gctattgt acagcaata aagaatatt tagtaattt aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaaa aaa</p>	A	Homo sapiens

660	194319	G Protein- Coupled Receptor FLJ22684	NP_079324.1	MKVGVLWLIS FFTFTDGHGG FLGKNDIDKT KKELIVNKKK HLGPEVEEYQL LLQVTYRDSK EKRLDRNFLK LLKPPLLSH GLIRAKA A ITDCNSLNGV LQCTCEDSYT WEPSPCLDPQ NCYLHTAGAL PSCECHLNNL SOSVNFCEBT KIWGTFKINE RFTNDLLNSS SAIYSKYANG IEIQLKKA YE RIQGFESVQV TQFRMSLLSP KLECNGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	atgagtctt gcaacttcc acalggccc ttgtgtcta ttggtatccc aggattagag aaagccatt tctgggttgg ctccccctc ctttccatgt atgtatggc aatgttttga aactgcatc tggcttcat cgttaaggagc gaacagagcc tgcagcctcc galtacatc ttctctgca tctgtcagc catgtacatg gccatcca catccaccat gccctaagatc ctggccctt tctgtttga ttccagagc attagtttg aggcctgtc taccagatg ttcttatic agcctctc agccattgaa tccaccatcc tgcctggccat ggccttgac cgttatgtgg ccatctgcca cccactggc catctgacg tgcctcaaca taccatgaaca gccagatg gcatcgtggc tgtgtccgc ggalccctct tttttccc actgctctg ctagatcagc ggtgtgctt ctgocactcc aatgtctct cgcactcta ttgtccac caggatgtaa tgaagtggc ctatgcagac acttggtata atgtgttata tggcttact gccattctgc tggctatggc cgtgacgta atgtatct cctgtctta ttctgata aacgaacgg tctgcaact gctttccaag tcaagagcggg ccaaggctt tggaaactgt ggtcacaca ttgtgtgtgt actgctctc taigtgccac ttatggcct ctacgttgta caccgttg gaaacagcct tcatccatt gtcgtgtg tcalgggtga catctaccg ctgtgctcc cgtcatcaa tccatcatc taigtgcca aaaccaaca gatcagaaca cgggtgctgg ctatgtcaa gatcagctgt gacaaggact tgcaggctgt gggaaggcaag tga MSSCNFTHAT FVLIGIPGLE KAHFWGFPPL LSMYVVMFNG NCIVFVIRT ERSLHAPMYL FLCMLAIDL ALSTSTMPKI LALFWFDSRE ISFEACLTQM FFIHALSAIE STILLAMAFD RYVAICHPLR HAAVLNNTVT AQGIVAVVR GSLFFFLPL LIKRLAFCHS NVLSHSCYVH QDVMKLAYAD TLPNVVYGLT ALLVMGV DV MFISLSYFLI IRIVLQPSK SERAKAFGTC VSHGVVLA F YVPLIGLSV HRFNSLHPI VRVVMGDIYL LLPVVPNPI YGAKTKQRT RVLAMFKISC DKDLQAVGGK	A	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	acttttca tgtctctt ggtgtgaaga tgaagaat gaaagcagag tatgcactt tattagag attcaactg catctactg gattagcctc aaagctcta aaatacaag acatccatc gatcagatc tgaaggagag actgtttt ctgttttga atagtccg atgaactt ttatgtcaa aagaataa gclagtatt tctaccacg ggtgtgatt ggtgttggc ttaccatgg ctccctgccc tgcctggaac cttaggggc tgggtgctgt cgtgtgtgga ctactgacg gcalctttt gggaacgggc atctggaggga ttgtatcag gatccaaa ggaatactia ctctcatc aagcaccct acagagtct gcaaggatgg tggaaacctgg gaaaatggca gatgtattg tacagaaga tggaaaggac tgaatgtac aatgtctaatt ttgtgaaa atagtacta tatgggttt acttttgcca gaatccagt gggaagatat ggaccatct tgcacaatg tggcaaggat actccaaatg cgggcaatcc aatggcagtc cgggtgtgca gtctctct atatgagag atagaatlac aaaaagagac aatagggaat tgcatagaaa atctggaaac cctggaaaag caggtagagg atgtcacagc accacttaat aacatttct ctgaagtcca gatttaaca tctgatgcca ataaataac tgcgtgaagc atcactagtg ctacggagt ggttggacag atattcaaca ctccagaaa tgcctaccd ggggcaaaa aggtggccat agtaacagtg agtaactcc tagatggag tgaagatgt ttcaaaagag tgcctgctac tgcataatgat gatggcccta caacgttat tgaacaatg gagaacttat cctgtctt gggaatcaa tcaatgtgg aacctaat agcaatagag tcaagcaatt tctctcaga aaatggcgtg gggtcttcaa agttcgtt ctctgtcag aaaggagctc gcagttctt agttctagt tcaacattt tcatataaa tgggtatggc cttaaccacg atgcacagc atgacttcag gtctgtcta atatgacgaa aaattaccc aagacalgc gcttttagt ttatcaaaaat gacaagctt tccaatcaaa aacttttaca gctaaatcgg attttgca aaaaattatc tcaagcaaaa ctgatgaaa tgaagcaagat cagaagctt ctgtgacat ggtcttagt ccaaaagtaca accaaaaaga atttcaact tattctatg cctgtgtcta ttggaaatg tcaagcgaag actggagac atagtgtctgt caaaaagaca aggggcactga tggattccgt cgtgcccgt gcaaccatc tactattt gctgtatcaa aaaggatatt caatatcca	P	Homo sapiens
663	194743	FLJ14454	NM_032787		A	Homo sapiens

[illegible]



666	194745	G Protein-Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaccatttgc actgacacgt tggagaacaa ggtaacagac catccggatc aatttggggc ttftggcagc ttctttatc ctggcattgc ctgtctgggt ctactgaag gtaacaaat ttaagacgg tgrtgagagt tgrtctttg attgacatc cccigacgat gtactctgt atacacttta ttggacgata acaacttiti ttitccctt acccttgati ttgtgtgtct atatttaatt ttaigtctat acttggaga tgaataca gaaataagat gccagatgct gcaatccag tgaatacaaa cagaragatga tgaagtggac aaagatggg ctggctctgg tggtagctt tatctgagt gctgcccct atcagtgtg actactggg aactiacaga tggaaagcc cacatggcc ttctatgg gttattacct cttcatctgt ctacgtatg ccagcagcagc cattaaacct ttcttaca tcttctgag tggaaatttc cagaagcgc tgcctcaaat ccaagaaga ggcactgaga aggaatacaa caataaggga aacacttga aatcacacti ttaggaaagt acatgagat ccatgagct agacatgati gttacttta ctgtattat tagaaaggcc aggtgacccg ataitgttat gccatttct ctgtgtact tgtacttct agcagcatgg aagagaagtg taoccatgca aatacaatga gcttaatatg ctaactgtaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>mnpfhascwn tsaellnksw nkefayqtas vvdvtvlpsm igiicstglv gnlivftii p rsrkktvpdi yicnlavatl vhlvgmpfli hqwarggewv fggplcttth slatcnqfac saimtvmvd ryfalvqfrr ltrwrtrykt irinlglwaa sfilalpww yskvikfdg vescafdlts pddvlywtly lttitffpl plilvcyli lcytwemyqq nkdarccnps vpkqxvmkl tkmvlvllvvf lsaapyhvi qlvnlqmeqp tlfayvgyyl siclsyass inpflylls gnfqkrlpq qrratekein nmgnltkshf</p>	Homo sapiens
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1	<p>ccacacac aggaaccca tcttgggtga tgaagtaca cagcagcagc ctgggtgagt gtaacgctc agataagcat ctgtgocatt gttgggactc ccttgggtgc tctgcacccg gacattgtct ctgtccccc catgtacaac ggtgtgtgt ggcgcacaga gggggacac atctccagg tgaatggccc gctgtctatt gttggcttgg tcttggggcc actaggcaat gggtgtgccc tgtgtgtt ctgtctcac atgaagacct ggaaagccag cactgtttac ctittcaat tggcgtgtgg tgaattctc cttaatgat gccgtgctt tggacagac latuactca gactgaaga ctgggtctt ggggacatc cctgtccagt ggggtcttc acgttggcca tgaacagggc cgggagatc gtttctta cgggtgtgtg tgcagacagg latitcaaa gtttccaccc ccacacggc gtaacacta tctccaccc ggtgtgtgtgt ggcacgtgt gacccctgtg ggccttggct atccitgggaa cagtgtatct ttgtctggag aacctatct gcgtgtcaaga gacggccgct tctgtgaga gttcatcat ggagtcggcc aatggctggc atgacatcat gttccagctg ggtttctta tgcctctgg catcatcta ttgtctct tcaagattgt tggagcctg aggcggaggc agcagctgtgc cagacaggtc cggatgaaga aggcgacccc gttcatcatg gttgtggcaa ttgtgtcat cacatgtatc ctgccagcg tgtgtgttag acttatitc ctctggagcg tgcctcgag tgcctggat cctctgtct atggggccct gcacataac ctacgttca cttacatga cagcatgtct gttccctgg tgaattati ttaagcccc tctttcca aatctaca caagctcaa atctgcagtc tgaacccaa gcagccagga cactcaaaa cacaagggcc ggaagagatg ccaatttga acctgtgtc caggtgtgtc atcagtggtg caaatgtt ccaagccag tctgtgtggc aatgggtatcc ccacatgtt ggtgtgtact gaaacagcag accaacaac ctgaggaaga tagagtggtg actagaatt aactgtgt aaggggtggc ggggtttgaa atgtccaccc ccttttcta ttgcaagcg gctctctgca catgaactgc atcttctca tctgttggg aatgaattc acagaact accittgg ggtgtccag tt</p>	Homo sapiens



671	194858	G Protein-Coupled Receptor LS194858	LG94710	QGLFIFLHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV	A	Homo sapiens
672	194858	G Protein-Coupled Receptor LS194858	ENSP000000053 533	<p>             ttagttcaag tcaagttcga cactgtcttg gctgtctggg tggtaggcaa tgcctggggcc gggactgtcc cggagggtc              ttcccacag cccctgcagg caccttgagg cggctgcccct ccaagggggtgt ggttagtgcct gtagtcccaa cccalggct              acgggacttg ccgtctgact ggcacttctt agggagagagga gggacacag tgtccaggcc cccagtggcg gggctgtctc              alaggccagg actgagagagga gcatgttgcc cactgtaggcc cccagcaca gccggaagag cagcaltggt ccaagctgtg              cccitgcttg cctccaggta agggcccggg ccaaggcgga gggctcagc cggcacactg cccgtccag ccggcagatg              tctctgagct ggggttgggc agtggccagc acgctggacag agaggaaggc agcagcacc accggcgggca gcaaggagccc              atagacttg aggtacaggt agggggcttg gtagtagcc tgggagctgc agtggccac aggggtccag tggttccacc              ccaggcggg cagactggca aagagcagg gaccagcca ggttagaggc agggccagcc gaaigtccc agggggcttg              agtggctca ggaactgcat gtagcctcc ccgtgacca gcaagaggtt ggcagcagg gaggagagag agaatggg              agccaagtag acgagggagg aggaaccagta acccgcgga ctctgttcc acagccctgg caatgtgggc aatgccagac              ccgtgagcag cccagccagc agtaggctca ggaagagaga gccagcaggt gggctgcgca gggcgcggtc ccaaggcgatg              ccaggggcta ggaagaggt cgcgttgatg atgaggcttg ccaggggcag ggaaggccc aaagcccc tgggaaagg              gctgggccc tggccagtg tgtggggct cactgtgtc ctggggacag gggagctctg gaggcgcgag cggcatgc              gctgggccc tggccagtg tgtggggct cactgtgtc ctggggacag gggagctctg gaggcgcgag cggcatgc           </p>	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	<p>             tcaaggccag gtagagaa tcatcgggc caccgctcag gtagatgag tgggggtgt tgaatcaa tgtattccc              atgttagcac agaatgttg tggcagtaga gtagggtag gcttcagat cagcaaggaa tggattcaa acttgattg              aggaaccca cctttgata ggtgactat tctctgtgag tctgtact gccctctta attagggag taaatccac atggcagggt              ggtgggga atcagagatc atacagcttg tgaicacaac tggtttgtt ttccagggtc accagactgg ggtttctgag              catggattca accatccag tctgggttac agactgaca ccaatcaag gactgtgagg gactctctgc tacaagcaga              cccitgagct cagggggctg acgtgcagc ttccctgt cggctgaca ggaagcggg tgtgtctg gctctgggc              tggcgcalgc gcagggaagc tgtctcacc tacaatcca accitgtgc gggcgactc ctctctta gggggccacat tatatgtc              ccgttacgcc tcatcaat ccggccatcc atctcaaaa tctcagtc tgtgtgacc ttccctact ttataggct aagcagctg              agcgccatca gcacaggagc ctgtctgtcc atctgtggc ccaltcggta ccactggcg ccgccagat acctgtc              ggtcatgtgt gctctgtct gggccctgt ccgtgcgg agtatccgg agtgcagtt ctgacttc ctgttagtg gtcgtgattc              tgttgggtt gaaacgtcag attcatc aatcggttg ctggtttt tatgtgtgt tctctgtgg tccagccctg tccitgtgt              caggatctc tgtgatatcc ggaagatgcc cgtgaccag ctgtagcga ccatctct caccagctg gctctctcc              tctgtggctt gcccttgcc atcagtggg cccgtttc caggatccac ctggatggc aagctctat tigtcatg calcatgtt              ccatttctt gtcggctct aacagcagtg ccaacccat calttactc ttctgggtt cctttaggca gcgtcaaat aggcagaaac              tgaagctgt tctccagagg gctctgcagg acacgctga ggttgtagaa ggttgtaggg ggtcttccca ggaacccgt              gtagctgcgg gaaagcagat ggaagcagta ggaagaaact ctggccctgc agacaggat ttagagagcaa tgcctgtcctg              ccaacctga caatatag caltttct agcctctgc ctcaagaatg           </p>	A	Homo sapiens

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQTLSE TGLTCTIVSLV ALTGNAAVVLW LLGCRMRRNA VSIYILNLVA ADFLFLSGHI ICSPLRLINI RHPISKILSP VMTFPYFIGL SMLSALTER CLSILWPIWY HCRRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFGADS VWCETSDFIT IAWLVFLCVV LCGSSLVLV RILCGSRKMP LTRLVYVILL TVLVFLLCGL PFGIQWALFS RIHLDWKVLV CHVHLVSIFL SALNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDTPPE VDEGGGWLPQ ETLELSGSRL EQ	P	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	icaegteggag ccgcagagccgc tegrfigtagtc ctgaataggag gctctggaggt gctctgfigct gttgagggctt eeggcggcaga ggatcacagta gcatctagagc agaaataatcc caccggagagcc gctgctcagg ctgctcagcc cagccatcat gttggcccgca ggacaggtaact tggccgctcgta gacgctggcc gttggtgaaaga agggctatcca ggacacagaaq ttgaagagca ggtctgaaggt ggacacattg gctcgtgtgt agttctctgg caagtcttta cccaggctagc tgcaggcmeta ggacactgagtg gtagggggaggg cattfigtagtg gaaaggccagt atgaagccca ggaggagttggt ctctgfigcac tcaagcatca ccaagatggggg gaaagcgtctgg lattccctag caggcgagttgg ggtccacacc accagcccaag ttgagacagat aaggcagctgg gcccgtgagc tgaatcac aaacaggccca gcaocggttgt ttggagccca ggccggtggtag aatgtaggtta ccttgggtgga aaacttgaaq atgatgatta gttggaaaga ggcgaactgic agggcaggaca gtagaagtaggt gaaacacagg ggcaaaaggagg cctgggcgtag caagcacgca ggccctgtgg gttcccaaa gaaagccatag aggtctggccac taactgtctg caagggaagccc agcalaaagaa agcacaggccg ggcccccgtct gacatcacca cagggggtgtc taggtgtccag gcaaaacaggc caggcagttccc aagcagcagcagc agcagcagca ggcgtgttagc tggcagcagc accaaaggagg tgggtctcagc caaaggccaaa aaacacacacag tgcggcgggaaa gcaaggctctgg cttcccctag gttggccatc tctttccca caaggctggc atctgttagag gttctgaagg gaaaggcccaag aagggttcttg aggcccaagt gtagcagagta gtagaagaa ataggggccct gcaagtagact gtagaagattg taocaggggca gctagactat actagacata gttgggaatgg ggtagccgggg agtggggccct gaggccacgc atttctcaa aatggccgttg taaatcacg actctgggaa cacaagggic ggtctgtat ggtctcatgat cccatgagggg ttggcaaac ctagggggagg accttaaact ggtagctctg ccacataacc agtagaggtta cgtatctgag ggtagcagccct gctcccaagg ggagggtcattg taaccccct ctctggocag catctcatg aaactcttc ctgagctgtct gctctgtggt tttctgtgag cctggacccc tggagacaga agggggagttat tctgttccct acagagtagg tgaagggaaa gaatgtggcc cctggagacc aactaaggag ctgagttccct agctacccaa tttggctct gttctgacc ttgcatctt gtaggtgggaa tggctgttt tttctgtctg cagacacagct agtatctgta ttacggccaa gctgttcaag gtagctagctg tctttgggcat ggagcaaca gtaggagagta gtagcagagtg ggacaaagggg aacaaagct ataatcatt agtagaagtag gttgaaatca gtagacagact gctttgttag gtaggtgtgtag gtagcgtctc taacagagtag cacacctag tctaagggtt ttaggtgtgt aatttctt ttttctt tttttgaga cagagtttt ctctgtcgc ccaggctggga gtagcagttg gcaatcttgg ctacgttgg cctccgctc ccgggttcaa gcaatttcc tggctcagcc tcccggtag ctgggaaatc aggcagacgc cacacgccc ggctaaactt ttgtgatt ttgtagtaga tgggggttca ccatgttgggt cagggtgggtc tggaaactct gaactcaggt gataccacca cctcggccgc ccaaggtgct gggaatcacg gttgtggagcca ccggccggccg cctcttct ttttgggg gtagcgaatc tggctttgtg gttccaggctg gaaatgcatct tgggtctacgt caacctccgc ctctgggtt caagtgatc tctggctca gctcccgag tagctggggt tacaaggcacg gtagccacca cccagctaat tttaatt ttggtagtag atgggggttc accatgttgg ccaggcttgg ctgggaactcc cgaactcaag tgaatcaccc gctctcagct cccaaagggtc tgggaatca ggcagtagcc accgcaacca gttggctgatt ctctgata gaaatctgic tggtagcaggt ctagctccaa cctgaaagct actggcaggg cagtgaactgg gcttgggtc tgggggaggg cagatggggg ccaagggtaggg cctctccccc accgtggcagc ccccgggaggt gctgggttagc tggctgtctc cattggccac tcaactct ttttggagaa gttgtccagccc ccacaggggca cacactcaaa gcaagcagtag tggaaacccc taacacttgg ctgggtggcc tcaagtagagt cggctgggaaca cagagactta ggcactctga agaaagccaga ggggccacac gtagggggccc aagtcaaaagg acagctcaca tggtagaag aaaaagaaat ctctgtgcat ctggccctcag ggctcactcc caggggcagggg cccctgtgtc tggtagactc ggcccaagggg catctgca	A	Homo sapiens

[illegible]



677	194904	WO0034334- hFB41A	AX147788	<p>VLGSSTWSPV QLNINETKIQ WHGKNHQVPK SVCSSDCLEG HORVVVTGFHH CCFECVPCGA GTFLNKSELY RQPCGTTEW APEGQTCFP RTVVFLALRE HTSWVLLAAN TLLLLLLGT AGLFAWHLDT PVRASAGRL CFLMLGSLAA GSGSLYGFEG EPTRPACLLR QALFALGFTI FLCLTVRSF QLIIFKFST KVPFYHAWV QNHGAGLFVM ISSAAQLLIC LTWL VVWVPL PAREYQRFP LVMLECTETN SLGFLAFLY NGLLSISAF CSYLKGDLP NYNEAKCVTF SLLNFVSWI AFFTTASVYD GKYLPAANMM AGLSSLSSGF GGYFPLKCYV ILCRPDLNST EHFQASIQDY TRRCGST</p> <p>gagcaacatg atcttttga agtacttga ggtgtcgttc ttgacgttga cgaagcacag agtntgtac atgttgttc tcatggcat A gcactgcagc atgtatgaagg cagtgaaggta gttctctcc ttacaaca cgtgtgggaa gaaatcgcgc acgatgttga agccgtatgaa gggcgccag catagcacgt aggcgttga gatgcacatg agcacccaga ccgtcttct gctggcagcgc agcccttgc ggtatctgtc tgtcttgaat ccaggagacc ccttgaacca ggtctccgc ggtatccctg catagcacag ggtcatgttg accaggggc ccacgaatc tatgcaaa gataagaga agtagagacti gtagtagagc tctgttcca caggccagat ctggccg-cag aagatcttt ctgtgtctt gacatgac aggaacc-gtct cgtgtgtgaa gtaggcggaa ggatgtgga tcaagatgga caccgtccac accaaggcaa taggccagt ggcgtttgg cacttatic gttgtctcag cgtatggaca atagccagat acctaggga agaacacaag tggaggcagc c MGFMDDNATN TSTFSLVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN P SRTFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLALADRYL AIVHPLRPRM KCQTATGLIA LVVTVSILIA IPSAYFTTET LVIVKSOEK IFCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFFPTVF VKEKHYLTAF YIVECIAMSN SMINTLCFVT VKNDTVKYFK KIMLLHWKAS YNGKSSADL DLKTIGMPAT EEVDCLRK</p> <p>ggcac-gagc gccggccgc atgtggagct gcagctggtt caaggcaca gggctgtgtg agtagcttgc tgcctgcag gacctgcagc tggggctgtc actgtgtc ctgtgtggcc tgggtgtgg cgttccagt ggcctgtgtt acacgcct gctgtgtctg gccaaactac acagcaaggc cagcatgacc atgcccggac tgtattgt caacatggca gttggcagcc tgggtctcag cgccttggcc ctgtgtcac tctcggccc ccgagctcc cgttgggcgc tgtgtgtgt gggcggcgaa gtccaggttg cactgtcagat cccctcaat gttgtctcac tgggtgcat gttatccacc gccctgttga gctcagaca ctacatcgag cgtgtcactgc cgtggactta catggccagc gttgtacaaca cgtgtgcacgt gttgtggcttc gttgtgggtg gctgtgtgt gacagcttc tctcgtct tcttctac ctgtcagcat gtttccacc gctcgtcaga gttgtccag atgcagaaac cagaagctgc cgtacgacag ctgtgttca tgggtcagct gttgtcagca ctgtccacc tctacgtct ggtgtctac tcccgctcc gcaaggagga cactgcccc gtaocgggaca cgttccggct gtaagccctc gacacagc tctgtgttg caccgtgtc acgcagtttg ggtctgtgac gccacactat ctatctcgc tggggcacac ggtcatc tcgcgagggga agccgtgtga cgcacactac ctgggtgtac tgcattgt gtaaggtttc tccaaatcc tggccttc cagcagcttt gttgacacac ttcttacc ctacatgac cagagctcc ccagcagct ccaacgtctc atgaaaaagc tgcctgtcgg ggaocggcac tgcctcccgg accatgggg ggtgtcagcag gttgtgtgt aggtcggcca gccctcttg ggaagctga ctctgtgtga cgcagagcac ttatgaccc tggagctcc ccacatctt ccagaaagag acgagctgt ggaagagag caggaagggt gttttcttg aagttctt ttccacaa atgcactat tggggcagag ctgtgttcc cgtgtgtcgt atctgtgtg agtctcccg aggcctgtgc gttccacaa cagcagctc aaggttccaca tctgcaaaag</p>	Homo sapiens
678	194904	WO0034334- hFB41A	LR114	<p>MGFMDDNATN TSTFSLVLN PHGAHATSP FNFSYSDYDM PLDEDEDVTN P SRTFAAKIV IGMALVGIML VCGIGNFIFI AALVRYKKLR NLTNLLIANL AISDFLVAIV CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLALADRYL AIVHPLRPRM KCQTATGLIA LVVTVSILIA IPSAYFTTET LVIVKSOEK IFCGQIWPVD QQLYYKSYFL FIFGIEFVGP VVTMTLCYAR ISRELWFKAV PGFQTEQIRK RLRCRRKTVL VLMCILTAYV LCWAPFYGT IVRDFFPTVF VKEKHYLTAF YIVECIAMSN SMINTLCFVT VKNDTVKYFK KIMLLHWKAS YNGKSSADL DLKTIGMPAT EEVDCLRK</p>	Homo sapiens
679	194905	G Protein- Coupled Receptor MGC7035	BC014241	<p>ggcac-gagc gccggccgc atgtggagct gcagctggtt caaggcaca gggctgtgtg agtagcttgc tgcctgcag gacctgcagc tggggctgtc actgtgtc ctgtgtggcc tgggtgtgg cgttccagt ggcctgtgtt acacgcct gctgtgtctg gccaaactac acagcaaggc cagcatgacc atgcccggac tgtattgt caacatggca gttggcagcc tgggtctcag cgccttggcc ctgtgtcac tctcggccc ccgagctcc cgttgggcgc tgtgtgtgt gggcggcgaa gtccaggttg cactgtcagat cccctcaat gttgtctcac tgggtgcat gttatccacc gccctgttga gctcagaca ctacatcgag cgtgtcactgc cgtggactta catggccagc gttgtacaaca cgtgtgcacgt gttgtggcttc gttgtgggtg gctgtgtgt gacagcttc tctcgtct tcttctac ctgtcagcat gtttccacc gctcgtcaga gttgtccag atgcagaaac cagaagctgc cgtacgacag ctgtgttca tgggtcagct gttgtcagca ctgtccacc tctacgtct ggtgtctac tcccgctcc gcaaggagga cactgcccc gtaocgggaca cgttccggct gtaagccctc gacacagc tctgtgttg caccgtgtc acgcagtttg ggtctgtgac gccacactat ctatctcgc tggggcacac ggtcatc tcgcgagggga agccgtgtga cgcacactac ctgggtgtac tgcattgt gtaaggtttc tccaaatcc tggccttc cagcagcttt gttgacacac ttcttacc ctacatgac cagagctcc ccagcagct ccaacgtctc atgaaaaagc tgcctgtcgg ggaocggcac tgcctcccgg accatgggg ggtgtcagcag gttgtgtgt aggtcggcca gccctcttg ggaagctga ctctgtgtga cgcagagcac ttatgaccc tggagctcc ccacatctt ccagaaagag acgagctgt ggaagagag caggaagggt gttttcttg aagttctt ttccacaa atgcactat tggggcagag ctgtgttcc cgtgtgtcgt atctgtgtg agtctcccg aggcctgtgc gttccacaa cagcagctc aaggttccaca tctgcaaaag</p>	Homo sapiens

680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>ccctctgcgc ttacgctcc tcagcattca gttgtcaat gaagtgatga aagcttagag ccagrattra tactttggg ttaataact tgattccoc ttgtttgt ttacaaaaca gatgttccct agaaaatga caaatagtaa aatgaacaaa accctacgaa agaattggcaa cagccaggggt ggccggggcc tgcagtggtg cggcgtgtgc tagcaaggcc tgcggggtgt ggcgcagtca ccacaggggt ctgagaacat ttacagaag tgcctgagac gggagagacat ggtgtgtgt aaatggagct atcaatagc agtgacgcgc ttctctcagc caccaaatgt cctgacacc cttcccagcc ccacagata acatcagctg aggttttt cagiatgaac ctgtctaaa tcaattctc aaagtgtga caaaactaaa gaatatataat aaacaaaaa aaggigaataa aaaaaaaa aaaa MWSCSWFNGT XLVEELXACQ DLQLGLSLLS LLGLVVGVPV GLCYNALLVL ANLHKSAMT MPDVVFVNMA VAGLVLSALA PVHLLGPPSS RWALWSVGE VHVALQIPFN VSSLVAMYST ALLSLDHYIE RALPRTYMAS VYNTRHVCGF VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEADAT LVFGLVVPVPA LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTHY LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMN QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCG GGAATGTCCC CTGAATGCG GCGGGCAGCG GCGACGCGC CTTTGGCAG CCTGGAGCAA GCCAACGCA CCGCTTTC CTCTTCTCC GACGTCAAG GCGACCCCG GCTGTGCTG CCGCGGTGG AGACAACCGT GCTGTGCTC ATCTTTCAG TGTGCTGCT GGGCAACGTG TCGCCCTGG TGTGTGTGC GCGCCGCGA CGCCGCGCG CGACTGCCG CCGTGTACT ACCTCTTCT GCGCGGACCT GCTCTCATC AGCGTATCC CTCTGTGCT GCGGTGGC TGGACTGAGG CCTCCCTGCT GGGCCCCGT GCGTCCACC TGCTCTTCTA CGTGATGACC CTGAGCGCA GCGTCACCAT CCTACGCTG CCGCGGTCA GCCTGGAGGG CATGTGRC ATCRGCACC TGGAGCGCG CTTGCGGGT CCTCCGCGG GGCGCGGGC AGTGCTGCT GCSTCATCT GGGCTATC GCGGTGCGC GCTCTGCTC TGTGCTCT CTTCGAGTC GTCCCGCAAC GGCTCCCGG CGCCGACCAG GAAATTCGA TTTCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCCTTTGTTA CTTTGAACCT CTGTGTGCA GGACTGGTCA TTGTATCAG TTACTCCAA ATTTACAGA TCACAAAGC ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTCGGAG ACCACCAGA TCCGCTGTC CCAGCAGGAC TTCCGGCTCT TCCGCACCCT CTTCCTCTC ATGGTCTCT CTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCTC CATCTGATC CAGAACTCA AGCAAGACCT GGTATCTGG CCGTCCCTC TCTTCGGGT GGTCCCTTC ACATTTGCTA ATTCAGCCCT AAACCCATC CTCTACAACA TGACACTGTG CAGGAATGAG TGAAGAAAA TTTTGTCTG CTTCTGGTTC CCAGAAAAGG GAGCCATTT AACAGACACA TGTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCCGAGTTTC TCACACCTGG CGAGCTGTGG CATGCTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGCACCTG CTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGCGCG GGAATGTCCC CTGAATGCG GCGGGCAGCG GCGACGCGC CTTTGGCAG CCTGGAGCAA GCCAACGCA CCGCTTTC CTCTTCTCC GACGTCAAG GCGACCCCG GCTGTGCTG CCGCGGTGG AGACAACCGT GCTGTGCTC ATCTTTCAG TGTGCTGCT GGGCAACGTG TCGCCCTGG TGTGTGTGC GCGCCGCGA CGCCGCGCG CGACTGCCG CCGTGTACT ACCTCTTCT GCGCGGACCT GCTCTCATC AGCGTATCC CTCTGTGCT GCGGTGGC TGGACTGAGG CCTCCCTGCT GGGCCCCGT GCGTCCACC TGCTCTTCTA CGTGATGACC CTGAGCGCA GCGTCACCAT CCTACGCTG CCGCGGTCA GCCTGGAGGG CATGTGRC ATCRGCACC TGGAGCGCG CTTGCGGGT CCTCCGCGG GGCGCGGGC AGTGCTGCT GCSTCATCT GGGCTATC GCGGTGCGC GCTCTGCTC TGTGCTCT CTTCGAGTC GTCCCGCAAC GGCTCCCGG CGCCGACCAG GAAATTCGA TTTCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCCTTTGTTA CTTTGAACCT CTGTGTGCA GGACTGGTCA TTGTATCAG TTACTCCAA ATTTACAGA TCACAAAGC ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTCGGAG ACCACCAGA TCCGCTGTC CCAGCAGGAC TTCCGGCTCT TCCGCACCCT CTTCCTCTC ATGGTCTCT CTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCTC CATCTGATC CAGAACTCA AGCAAGACCT GGTATCTGG CCGTCCCTC TCTTCGGGT GGTCCCTTC ACATTTGCTA ATTCAGCCCT AAACCCATC CTCTACAACA TGACACTGTG CAGGAATGAG TGAAGAAAA TTTTGTCTG CTTCTGGTTC CCAGAAAAGG GAGCCATTT AACAGACACA TGTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCCGAGTTTC TCACACCTGG CGAGCTGTGG CATGCTTTA AACAGAGTTC ATTCCAGTA CCCTCCATCA GTGCACCTG CTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGTGAT CACCAAGTTT CATAATATT TCCCTTTATA AAAGGATTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	A	Homo sapiens



682	194907	G Protein- Coupled Receptor 14273	LR116	P	Homo sapiens	TCCCAGCAGT TTGGGTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTGG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAAATTA GCTGGGAGTG GTGGTGGGCA CCGTAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAA CTCTGAACC TGGGAGGCAG AGGTGTCAGT GAGCCGAGAT CGTGCCATTG CACTCCAACC AGGCAACAA GAGTGAAACT CCATCTTAAA AAAAAAAA AAAGATTGTG TATGGGTCC TTITAAATGT GAACTTTTIT AGTGTTTG TATATGATCA AATTAATAA ATATTATTT ATGACTGTC AGCAAAAAA AAAAAAAA AGGCGGG MSPECARAAG DAPLRLEQA NRTFPFSD VKGDHRL VLA AVETTVLVI FAVSLGNVC ALVLVARRR RGATACLVLN LFCADLLFIS APLVLAVRW TEAWLLGPVA CHLLFYVMTL SGSVTILTL AVSLDRMVCV VMLQGRVRC GRRARAVLLA LIWYSAVAA LPLCVFFRVV PQLPGADQE ISICTLIWPT IPGEISWDVS FVTNLNFPV LVIYSYSKI LQTTKASRR LTVSLAYSRS HQIRVSQQDF RLFRITFLLM VSFIMWSP I IDTILLIQ NFKQDL VIWP SLPPWVAPT FANSALNPIL YNMTLORNEW KKIFCCTWFP EKGAITDTS VKRNDLSIS G ITYSAISDEL RDKVRFPALL RTTPSADHHV EAMVQLMLHF RWNWIVLVS SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNMITS EERQRLVTIV DKLQQSTARV VVVFSPDLTL YHFFNEVLQ NFTGAVWIAS ESWAIDPVLH NLTELHGLGT FLGITIOSVP IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYAVAHALHS LLGCDKSTCT KRVVYPWQLL EEIWKVNFTL LDHQIFFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRQLKNIKTS LHTVNNTPM SMCSCRQSG QKKKPVGIHV CCFECIDCLP GTFLNHTIECP NNEWSYQSET SCFKRQL VFL EWHEAPTIAV ALLAALGFLS TLAILVIFWR HFQTPIVRSA GPMCFMLMT LLLVAYMVVP VYVGPVKVST CLCRQALFPL CFTICISCIA VRSFQIVCAF KMASRFPRAV SYWVRYQGPY VSMAFITVLK MVIVVIGMLA RPQSHPRITDP DDPKITIVSC NPNYRNSLLF NTSLDLILLSV VGFSFAYMGK ELPTNYNEAK FITLSMTFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFNSM IQGYTMRRD
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	P	Homo sapiens	atgagcagca atfcatccct gctggiggct ggcagcgtg gctacgcgaa cglgaatggg tccigtgtga aaatccctt ctgcggga tccgggga tictgacat agtgttggc ttggggctg tgcctggctg gtttggaaac ctctgggga tgaattcaat ctccattc aagcagctgc acitcccgac caatttctc gtgctctc tggcctgc tgaattctg ggggggtgga ctggtggtc cttcagcatg gtcagcagg tggagagctg ctggaattt gggagagagt ttggaattt ccacacctgc tggaggtggt cattttgtia ctctctc ttcaattg gcttctc cctgcagcagg tacattggg ttactgacc cctgctat cctacaaagt taccgtatc tgtgtcagga atttgcaltca gctgtctg gatctgccc ctcaltgaca gctgtgctg gtctacaca ggtgtctg acgatgggt ggaggaatta tctgatccc taacigtat aggggtgtg cagacgtgtg taatcaaaa cgggggtg acagatttct latctctt talacciac ttattatga taattctg tggtaacata ttctgtgg ctgacgaca ggcgaagaag atagaaata ctggtagcaa gacagaalca tctcagaga gttacaagg cagatggcc aggaagaga gaaagcagc taaacccct ggggtcacag tggtagcatt tatgattca tggtaacat atagcattga ttcaattt gatgcttta tgggtctt aacccctg tgaattatg agatttctg ttgggtgct tattaact cagccalga tcttgatt tatgcttat ttaccatg gtttaggaa gcaataaag
684	194957	Trace Amine Receptor 4 (TA4)	AF380192	A	Homo sapiens	

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttatigtaac tggicaggtt itaaagaaca gticagcaac caigaatttg ttitcgaac atalaiaa  MSSNSLLVA VQLCYANVNG SCVKPFSPG SRVILYIVFG FGAVLAVFGN  LLVMISILHF KQLHSPTNFL VASLACADFL VGVTVMPFSM VRTVESCWYF  GRSFCTFHTC CDVAFCYSSL FHLCFISIDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP  LMYSGAVFYT GYVDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT  FIMILYGNL FLVARRQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL  GVTVAFMIS WLPYSIDSLI DAFMGFITPA CIVEICWCWA YNSAMNPLI  YALFYPWFRK AIKVITGVQV LKNSSATMNL FSEHI</p> <p>atgaccagca attitocca accctgtgtg cagctgtgtc atgaggatgt gaaagatct tgaatgaac ctocctatc tccitgggtcc  cgggtatc tgaacagggc gtttagctt gggctgttc tggctgtat tggaaatct tgaatgaac ctctgtct tcaitttaag  cagctgcaat ctoccaacca ttittcaat ggcctgttc cctgtctga ctctgtga ggtgtgacgt tgaatctt cagcatggc  aggacgggtg agagctgtctg gtaatttga gccaaattt gactctca cagtgtctg gttgtggcat ttgttact ttgtctc  cactgtct tcatctcat cgacaggatc atgtgtga ctgacccct ggtatgtc accaagtca cgtgtctgt gtcgggaatt  tgcacagcg tgccttgat tctgtctc acgtacagcg gtgtgtgt ctacacaggt gtaatgag atgggtctgga  ggaattaga agtctctca acgtgtgag tggctgtca atattgaa gtcaaggctg ggtgtgata gatttctgt tattctcat  acctacct gttatgataa ttcttacag taagtatt ctatagta aacaacagc tataaattt gaaactacta gtagcaagt  agaaalcc tcaagagt alaaatcag agtggccaag agagaagga aagcagctaa aacctgggg gtcacggatc  tagcaattg tattttag ttacgtata cagtgtat ataatgat gacttttag gctctgtac cctgtctat atctatgaa  ttgtgtg ggtgtctat taactcag ccaagatcc ttgattat gctatatt atctgtgt taggaagcc ataaactta  tttaagg agatgta aggtagt catcaacct tagttatt tagaataa</p> <p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLAVFGNL  LVMTSLHFK QLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG  AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVYTDPLVYA TKFTVSVSGI CISVSWILPL  TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWVLI DFLFFIPTL VMILYSKIF  LIAKQQAIKI ETTSSKVESS SESYKRVAK RERKAAKTLG VTVLAFVISW LPYTVDLID  AFMGFLTPAY IYEICCWSAY YNSAMNPLY ALFYPWFRKA IKLILSGDVL  KASSSTISLF LE</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>tgcatgtct tcttctctg ccatggaaga ccagtcctag tcaagaggtg gtcaacaaca cctctgtg tatctgaatt cctccaactg  aaagaaatt tcaagaccag gtagatga tcatgggtc caaagccctg gccgagtag gtcgggtgtg ttgatctaa  tgtaattcc atgtcagcac agaatgtgtg tggcagtaga gtagatcag gcttcaaggt caacaagaac tggattcaa  acttgattg aggaacccca cctttgttaa gtgactatt atctgtgagc ctctgtct ctctctta aatgaaggaca gtaaatcca  tacggcaggg tgggtggggag aatcagagat gatacagctg gtgatacat ctgtttgtg ttccaggggg caccagacia  gagtttctga gcatgatalcc aacctgtcca gtcttggtta caaaactgac accaataaac ggaactgtgag agactctgt  ctacaatcag acctgagct tcaaggtct gactgtgcat atttccctg tggagactgac aggaacagcg gtagtgtct  ggctctgag ctaccgcatg cgcaggaagc ctgtctcat ctacatctc aaactgtccg cagcagacti ccttctctc  agcttccaga ttatagttc gcatatagc ctatcaata tcaagccatc tcatccgataa atctctgtt ctgtatgac ctctccatc  ttacagggc tgaatagct gtagcgcac agcacagagc gtcctgtctc tgtctgtg occatgtgt accgtgtccg  ccggcccaaca cactgtctg cgggtgtgtg tgtctgtctc tgggtgtctg cctgtgtgtg tgaatgtgt gtaggtgtgt tctgtgtgt  cctgtgtgt gtaggtgtgt clagtgtgtg tgaacagta gatttcalcc cagctgtgtg gctgtgtgt ttatgtgtgt tctgtgtgt  ttccagctgt gtcctgtgt tcaagatct ctgtgtgt cgggaagagc gctgtgtgt accatctgt</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>tgcatgtct tcttctctg ccatggaaga ccagtcctag tcaagaggtg gtcaacaaca cctctgtg tatctgaatt cctccaactg  aaagaaatt tcaagaccag gtagatga tcatgggtc caaagccctg gccgagtag gtcgggtgtg ttgatctaa  tgtaattcc atgtcagcac agaatgtgtg tggcagtaga gtagatcag gcttcaaggt caacaagaac tggattcaa  acttgattg aggaacccca cctttgttaa gtgactatt atctgtgagc ctctgtct ctctctta aatgaaggaca gtaaatcca  tacggcaggg tgggtggggag aatcagagat gatacagctg gtgatacat ctgtttgtg ttccaggggg caccagacia  gagtttctga gcatgatalcc aacctgtcca gtcttggtta caaaactgac accaataaac ggaactgtgag agactctgt  ctacaatcag acctgagct tcaaggtct gactgtgcat atttccctg tggagactgac aggaacagcg gtagtgtct  ggctctgag ctaccgcatg cgcaggaagc ctgtctcat ctacatctc aaactgtccg cagcagacti ccttctctc  agcttccaga ttatagttc gcatatagc ctatcaata tcaagccatc tcatccgataa atctctgtt ctgtatgac ctctccatc  ttacagggc tgaatagct gtagcgcac agcacagagc gtcctgtctc tgtctgtg occatgtgt accgtgtccg  ccggcccaaca cactgtctg cgggtgtgtg tgtctgtctc tgggtgtctg cctgtgtgtg tgaatgtgt gtaggtgtgt tctgtgtgt  cctgtgtgt gtaggtgtgt clagtgtgtg tgaacagta gatttcalcc cagctgtgtg gctgtgtgt ttatgtgtgt tctgtgtgt  ttccagctgt gtcctgtgt tcaagatct ctgtgtgt cgggaagagc gctgtgtgt accatctgt</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcatgtct tcttctctg ccatggaaga ccagtcctag tcaagaggtg gtcaacaaca cctctgtg tatctgaatt cctccaactg  aaagaaatt tcaagaccag gtagatga tcatgggtc caaagccctg gccgagtag gtcgggtgtg ttgatctaa  tgtaattcc atgtcagcac agaatgtgtg tggcagtaga gtagatcag gcttcaaggt caacaagaac tggattcaa  acttgattg aggaacccca cctttgttaa gtgactatt atctgtgagc ctctgtct ctctctta aatgaaggaca gtaaatcca  tacggcaggg tgggtggggag aatcagagat gatacagctg gtgatacat ctgtttgtg ttccaggggg caccagacia  gagtttctga gcatgatalcc aacctgtcca gtcttggtta caaaactgac accaataaac ggaactgtgag agactctgt  ctacaatcag acctgagct tcaaggtct gactgtgcat atttccctg tggagactgac aggaacagcg gtagtgtct  ggctctgag ctaccgcatg cgcaggaagc ctgtctcat ctacatctc aaactgtccg cagcagacti ccttctctc  agcttccaga ttatagttc gcatatagc ctatcaata tcaagccatc tcatccgataa atctctgtt ctgtatgac ctctccatc  ttacagggc tgaatagct gtagcgcac agcacagagc gtcctgtctc tgtctgtg occatgtgt accgtgtccg  ccggcccaaca cactgtctg cgggtgtgtg tgtctgtctc tgggtgtctg cctgtgtgtg tgaatgtgt gtaggtgtgt tctgtgtgt  cctgtgtgt gtaggtgtgt clagtgtgtg tgaacagta gatttcalcc cagctgtgtg gctgtgtgt ttatgtgtgt tctgtgtgt  ttccagctgt gtcctgtgt tcaagatct ctgtgtgt cgggaagagc gctgtgtgt accatctgt</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	<p>tcacagtct ggcttctctc ctctgcggcc tgccttcggc cattctgggg gccctaatc acaggatgca cctgaattg gaagcttat atttcalgt ttatctggt tgcaltgccc tgcctctct aaacagtagt gccacoccca tcaattact ctctcgggg tcccttaggc agcgtaaaaa taggcaagaac ctgaagctgg ttctccagag ggctctgcag gacaagcctg aggttgataa aggtgaagg cagcttccig aggaagcctt ggaagctgic ggaagcagat tggggccatg agggagagcc tctgcctctg cagtcagacg ggactttgag agcaacacig tcttgcacc ctigacaat acatcggtt tcttagcgt tgcctcag aaatgctca gttgaact aaggttca aataaattg ttactaact gacagtgc gtttacc acc tgggaagca tagctgac agtaaatgt ttgg MDPTVPVFGT KLTPIINGREE TPCYNQTLST TLTCTIISLV GLTGNAVVLW P Homo sapiens</p> <p>LLGYRMRNA VSYILNLAA ADFLFSQI IRSPLRLINI SHLRKILVS VMTFPYFTGL SMLSAISTER CLSVLWPIWY RRRPHTLSA VVCVLLWGLS LLFSMLEWRF CDFLFGADS SWCETSDFI VAWLFLCVV LCVSSLVLLV RILCGSRKMP LTRLVVTLL TVLVFLCGL PFGILGALY RMHLNLEVLV CHVYLVCMSL SSLNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDKPE VDKGEGQLPE ESELGSRLL GP A</p> <p>atgaacaca atacaacag tattcaaca tctatgat ctccatgag ttacaacac attacatcc tctttgat tttgttgtt tttggaaaca cttcttca atgataatt ttacaaaaa taggtzaaaa aacatcaacg cacatcac tgcacacact tggactgca aacitacttg tggcagtc calgcttcc atgagatct atttctgaa aggttccaa tgggaatc aatctgctca algcagagtg gtcaatttc tgggaactct atccatgcat gcaagtagt tigtcagct cttaattta agtttgatg ccaaaagccg ctatgctacc ttaatgcaaa aggaattcttc gcaagagact acttcatgct algagaaaaa attttatgg catttactga aaaaatttc ccagcccaac tttctagaa aactatgcat ttacatagg ggaagtgtac tgggcataat cattccagti accgtatcat actcagtgic tcaatggaac gaaggagaag agagoccatg ctacaatgg cagatggac tagggccat gatctctcag attgcaggtc tcaatggaac cacatttat ggaatttct tttagtagt actaacatca tactactct ttgaagca tctgagaaa atagaacact gtaagccat taaggagaaa gatttagcti acagtctgt gaaaagacat ctttggica tccagatcti actaaatgt tgcctctc ctatagat ttttaaacc attttatg ttctacaca aagagataac tgcagcaat tgaattatt aatagaaca aaaaacalc tcaactgct tgcctggcc agaaagtagca cagacccat tatattct ttatagaca aaacatcaca gaagacacta tataatcti ttacaagtc taattaga calatgaat cataggttg a</p> <p>MNNNTTCIQP SMISSMALPI IYLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA P Homo sapiens</p> <p>NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTL SMH ASMFVSLIL SWAISRYAT LMQKSSQET TSCYEKIFYG HLLKKFRQPN FARKLCYIW GVVLGIIIPV TVYYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVVLTS YYSFVSHLRK IRTCTSIMEK DLTYSSVKRH LLVIQILLIV CFLPYSIFKP IFYVLHQRDN CQQLNYLIET KNILTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMQSYG</p>
690	195015	G Protein- Coupled Receptor GPR82	AF411111	
691	195015	G Protein- Coupled Receptor GPR82	AAL26482	

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	Species
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccctttgag accggcgga acactactgg tatctccgac gtgacogtca gctaccaagt gatcacctct ctgtgctgg gaacgtctcat ctctcgcg gtctgggca atcggtgcgt ggtggctgcc atcgcttgg agcgctccct gcagaaactg ccaatctatc ttattggctc ttggcggtc accgacctca tgggtgctgg gtgtgtgctg ccattggccg cctgtatca ggtgctcaac aagtggacac tgggccagggt aacctggac gtgttcacat cctcgacgt cgtgtgctgc acctcatcca tcttgacat gtgcgccatc gcgctggaca ggtactgggc catcacggac cccatcgact acgtgaacaa gaggaagccc cgccgcgctg cgctcatctc gctcacttgg cttattggct tctctatctc tatccgccc atctgggct ggcgacccc ggaagacgcg tcggaccccc acgcatgcac cattagcaag gatcatggct aactatcta tccacctt ggagcttct acatccccgt gctgctcatg ctggttctct atggcgcat attcogagct gcgcgcttc gcatccgcaa gacggtcaaa aagttggaga agaccggagc ggacaccgc catggagcat ctccgcccc gcagcccaag aagagtgtga atggagagtc ggggagcagg aactggaggc tggcgctgga gagcaaggct gggggtgctc tgtgcgcaa tggcggtg aggcaagggt acgatggcg cgccctggag gtgctcgagg tgcaccaggt gggcaactcc aaagagcact tgcctctgcc cagcgaggct ggtctaccc ctgtgcccc cgcctcttc gagaggaaa atgagcgcaa cgccgagggc aagcgcaaga tggccctggc ccgagagagg aagacagtga agacgctgg catcatcatg ggcaccttca tctctgctg cctgcccctc ttcatcgctg ctcttgttct gccctctgc gagagcagct gccacatgcc caccctgttg ggcgccataa tcaattggct gggctactcc aactctctgc ttaacccctg catttaogca tacttcaaca aggactttca aaacgggtt aagaagatca ttaagtgtaa ctctgcgcg cagtga	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVLSPGQGN NTTSPAPFE TGGNTGTGSD VTVSYQVITS LLLGTLI FCA VLGNACVVAA IALERSLQNV ANYLIGSLAV TDLMSVLVL PMALYQVLN KWTLGQVTC LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRTPEDR SDPDACTISK DHGYTIYSTF GAFYIPLLIM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASAPAPQPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDGGALE VIEVHRVGNIS KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLPP FIVALVLFFC ESSCHMPTLL GAIINWLGYS NSLNPVIYA YFNKDFQNAF KKIICKNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggagggaac cgggtgctca gtgcgctcca cgcgcgcgcg cgggctccga gacctgggtt cctcaagcca acttatctc tgcctccctc caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctggaaagta ctgctggta tgctattggc gctcatcacc ttggccacca cgtctccaa tgccttctgt attgccacag tgtaaccggac ccggaactg cacacccccg ctaactacct gatgcctct ctggcggtca ccgacctgct tgtgtccatc ctggtgatgc ccatcagcac catgtacct gtcaccgccc gctggacact gggccagggtg gtctgtgact tctggctgtc tgcggacatc acttgggtga ctgcctccat cctgacacct tgtgtcatcg ccctgggaccg ctactgggccc atcacggagc ccgtggagta ctcagctaaa aggactocca agagggggcg ggtcatgatc gcgctgggtg gggtctctc catctctatc	A	Homo sapiens

4	128	5-HT1B Receptor	NP_000854.1	<p>tcgtgcgcg ccttctctg gcgtcaggct aaggcgaag aggaggtgc ggaatgcgtg  gtgaacacg accacatct ctacacggt tactcacgg tgggtgctt ctactcecc  acctgtcc teatgcct ctatggcgc atctacgtag aagccgcgc ccgattttg  aaacagacg caacacggc cggcaagcg cctctctat aactcgagg tccccagcgt aaccgactcc  cccgggtcca cgtcctcgg cactctatt aactcgagg tccccagcgt aaccgactcc  tccggatctc ctgtgtatg gaaccaagt aaagtgcag tctccgacg cctgctggaa  aagaagaac tcctggcgc tagggagcg aagccacca agaccctagg gatcatttg  ggagccttta ttgtgtgtg gctacccctc tctatctct cctatgtat gctatctgc  aaagatgcct gctggttcca cctagccatc tttagctct tcaatggct gggctatctc  aactccctca tcaaccccat aatctatac atgtccaatg aggactttta acaagcattc  cataaactga tacgttttaa gtgcacaagt tga</p> <p>QNCsAKDYIY QDSISLPWKV LLVMLLALIT P  LATILSNAFV IATVYTRKL HTPANYLIAS LAVTDLLVSI LVMPISTMYT VTGRWTLGQV  VCDFWLSSDI TCCTASILHL CVIALDRYWA ITDAVEYSK RTPKRAAVMI ALWVFSISI  SLPPFFWRQA KABEEVSECV VNTDHILYTV YSTVGAFYFP TLLILIALYGR IYVEARSRL  KQPNRTGKR LTRAQLITDS PGSTSSVTSI NSRPVDVPE SGSPVYVNOV KVRVSDALLE  KKKLMAARER KATKTLGIIL GAFIVCWLPF FIISLVMPIC KDACWFHLAI FDFFTWLGYL  NSLINPIIYT MSNEFKQAF HKLIRFKCTS</p>	Homo sapiens
5	129	5-HT1D Receptor	NM_000864	<p>agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca A  gtcagcagaa ggccttcccc aggaggcctc caacagatcc ctgaatgcca cagaaacctc  agaggttgg gatcccgagg cctccaggc gctcaagatc tcccttgccg tggctcttc  cgtcatcaca ctggccacag tctctccaa tgcctttgta ctaccacca tcttactcac  caggaagctc cacaccctg ccaactacct gattggctcc ctggccacca ccgacctctt  ggtttccatc ttggtaatgc ccatcagcat cgcctatacc atcaccaca cctggaaatt  tgcccacaa tcgtgtgaca tctggcgtc ctctgacatc agtgcgtgca cagcctccat  cctgcatctc tgtgtcattg ctctggacag gtactgggca atcacagatg cctgggaata  cagtaaacgc aggacggctg gccacggcg caccatgac gccattgtct gggccatctc  catctgcatc tccatcccc cgtctctctg gggcaggcc aaggcccagg aggagatgtc  ggactgtctg gtgaacacct ctcatatctc ctacaccatc tactccacct gtggggcctt  ctacattccc tcggtgttgc tcatcatctc atatggccgg atctaccggg ctgcccggaa  ccgcatcctg aatccacct cactctatgg gaagcgttc accacggccc acctcatcac  aggctctgcc ggtctctgc tctgctcgt caactccagc ctccatgagg ggcactcgca  ctcggtgctg tccctctct ttttcaacca cgtgaaatc aagcttgctg acagtgcct  ggaacgcaag aggatttctg ctgctcgaga aaggaagcc actaaaatcc tgggcatcat  tctgggggccc ttatcatct ctggtgctg tctctctggt gtgtctctgg tctcccat  ctgcccgggac tctgctgga tccacccggc gctcttgac ttcttcacct ggtaggcta  tttaactcc ctcatcaatc caataatcta cactgtgtt aatgaagagt ttcggcaagc  ttttcagaaa atgtccctt tccggaaggc ctcttagtct tattcgatga ggtaaagaaa P  MSPLNQAEG LPQEASNRSL NATETSEAWD PRTIQLKIS LAVLSVITL ATVLSNAFVL  TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISAIYTI THTWFGQIL CDIWLSSDIT  CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK</p>	Homo sapiens
6	129	5-HT1D Receptor	NP_000855.1	<p>ttttcagaaa atgtccctt tccggaaggc ctcttagtct tattcgatga ggtaaagaaa P  MSPLNQAEG LPQEASNRSL NATETSEAWD PRTIQLKIS LAVLSVITL ATVLSNAFVL  TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISAIYTI THTWFGQIL CDIWLSSDIT  CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK</p>	Homo sapiens

7	130	5-HT1E Receptor	NM_000865	<p>           AQEEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGR IYRAARNRIILN PPSLYGKRFT            TAHLITGSAG SSLCSLNSSL HEGHSHSAGS PLFFNVHKIK LADSALERKR ISAARERKAT            KILGIILGAF IICWLPPFV SLVLPICRDS CWIHPALFDF FTWILGYLNSL INPIIYTVFN            EEFROAFQKI VPRFKAS         </p> <p>           atcgaatgtt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcgggttcgcg A            agtgagactt ctggagccag ctggacgtgc cggtttgccc agtgcggcgc ggctgcacgc            accgtccaca agagtctcag tcgcccaggc cagcacagtc tcacctcatt            gaaacctccg cctcccgggt tcgcgggttc tcgcctcag cttcctagta cttgggattg            caggcaactca ccaccatgcc cggctaattt ttggaatttt tagtggagac gggatttcac            catgttgccc atgtgggtct tgaaccccg acctgggatg attcgccgcg ctcggccctcc            caaagtgtg gaattacagg gaaaccttca ctcaagaaga atgtgtggc cttcccttt            accaacagaa aatggaacac aagagaccac atagtgaac aaattatagc ctcttaca            gtgagaaacc ttcgaggcta catagttttc agcaaaagga aaataaccaa cagcttctcc            acagtgtaga ctgaaacaag gaaacatga acatcacaaa ctgtaccaca gaggccagca            tggctataag acccaagacc atcactgaga agatgctcat ttgcatgact ctggtgttca            tcaccacctt caccacgttg ctgaacttgg ctgtgatcat ggctattggc accaccaaga            agctccacca gcttgcacaac tacctaattct gtctctggc cgtgacggac ctctgtgtgg            cagtgtcgt catgccccctg agcatcatct acatgtctat ggatcgtcgg aagcttgggt            acttctctg tgaggtgtgg ctgagtgtgg acatgacctg ctgcacctgc tccatctcc            acctctgtg cattgccctg gacaggtact gggccatcac caatgctatt gaatacgcca            ggaagaggac ggccaagagg gccggttga tgatcttacc cgtctggacc atctccattt            tcattccat gccctctctg ttctggagaa gccacggccg cctaagccct ccccttagtc            agtgcacctt ccagcacgac catgttatct acaccattta ctccacgtg ggtgcgtttt            atatccctt gactttgata ctgattctct attaccggat ttaccacgcg gccaaagacc            ttaccagaa aaggggatca agtcggcact taagcaacag aagcacagat agccagaatt            ctaccacaga ttgtaaaact acacagactt tctgtgtgc tgacttctcc acctcagacc            tagatcacc aggaagaact cagcagatct ctgacaccag ggaacggaag gcagcacgca            tcctggggct gattctgggt gcattcattt tatctggct gccatttttc atcaaaagat            tgattgtggg tctgagcacc tacacgtgt cctcggaagt ggcgacctt ctgacgtggc            tcggttatgt gaattctctg atcaacctc tgctctatag gagttttaat gaagacttta            agctggcttt taaaaagctc attagatgcc gagagcatat tagactgta aaaagctaaa            aggcacgact ttttccagag cctcatgagt ggatgggggt aaggggtgca acttattaat            tcttgaacat acttgggttca ggagagtttg taagtatgtg tggctctgtt tcctgtttg            ttgtttgtt ttgttctgt ttgtttgagg atgttattt ggcgtgctgt ttctacctc            tgggtcttacc tgtgatacat aatttcaaat aaacattatc atacaaaaac aaaaaaaaa            aaaaaaaaa         </p>	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	<p>           MNITNCTTEA SMAIRPKTIT EKMLICMTLV VITLTLLN LAVIMAIGTT KKLHQPNLYL P            ICSIAVTDLL VAVLVMPLSI IYIVMDRWKL GYFCEVWLS VDMTCCTCSI LHLCVIALDR            YWAITNAIEY ARKRTAKRAA LMILTVMTIS IFISMPPLFW RSHRRLSPPP SQCTIQHDHV            IYTIYSTLGA FYIPLTLILI LYRIYHAAK SLYQKRGSSR HLSNRSTDSQ NSFASCKLTQ         </p>	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDPSTS DPTTEFEKFH ASIRIPPFEN DLDPGERQQ ISSTRERKAA RILGLILGAF ILSWLPEFFIK ELIVGLSIYT VSSEVADFLT WLGYNLSLIN PLYTSFNEF FKLAFKKLIR CREHT</p> <p>atggatttct taaattcatt tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgggtgc cctcactctg tctgggctgg cactgatgac aacaactatc aactcccttg tgatcgctgc aattattgtg acccggaagc tgaccatcc agccaattat ttaatattgtt ccttgagcag cacagatttt ctttggtgtg tctgggtgat gcccttcagc attgtgtata ttgtgagaga gagctggatt atggggcaag tggctctgtga catttggtg agtgttgaca ttaacctgctg cacgtgctcc atcttgcatc tctcagctat agctttggat cggatctgag caatcacaga tgctgttgag tatgccagga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctattc tggaggcacc aaggaactag cagagatgat gaatgcata tcaagcacga ccacattgtt tccaccattt actcaacatt tggagctttc tacatccac tggcattgat ttgtatcctt tactacaaaa tatatagagc agcaaaagaca ttataccaca agagacaagc aagtaggatt gcaaaggagg agtggaatgg ccaagtcttt ttggagatgt gtgagaaaaa cactaaatca gtttccacat cctatgtact agaaaagtct ttatctgacc catcaacaga ctttgataaa attcatagca cagtgaag tctcaggctc gaattcaagc atgagaaatc ttggagaagg caaaagatct caggtaacag agaacgaaa gcagcacta cctgggatt aatcttgggt gcatttgtaa tatgttggtc tctttttttt gtaaaagaat tagttgttaa tgtctgtgac aaatgaaaaa ttctggaaga aatgtccaat tttttggcat ggcttgggta tctcaattcc cttataaaatc cactgattta cacaatcttt aatgaagact tcaagaaagc attccaaaag cttggcgat gtcgatgta g</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>MDFLNSSDQN LTSEELNRM PSKILVSLTL SGLALMTTII NSLVIAAIIV TRKLHPANY P LICSLAVTDF LVALVMPFS IVYIVRESWI MGQVCDIWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKTPKHA GIMITIWIIV SVFISMPPLF WRHQGTSRDD ECI IKHDHIV STIYTFGAF YIPLALIL YKIYRAAKT LYHKRQASRI AKEEWNGQVL LESGEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLSRS EFKHEKSWRR QKISGTRERK AATTGLLIG AFVICWLPFF VKELVNVCD KCKISEMSN FLAWLGLYNS LINPLIYTF NEDEKKAFOK LVRRC</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caagtgtaat ggtgagcaga aactataacc tgttagtctt tctacacctc atctgtaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc agctctaca gtaatgactt taactctgga gaagctaaca cttctgatgc atttaactgg acagtcgact ctgaaaaatcg aaccaacctt tctgtggaag ggtgcctctc accgtcgtgt cctcctttac ttcatctcca ggaaaaaac tggctctgctt tactgacagc cgtagtgatt attctaacta ttgctggaaa catactcgtc atcatggcag tgtccctaga gaaaagctg cagaatgcca ccaactattt cctgatgtca ctggccatag ctgatgtgct gctgggtttc cttgtcatgc ccgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgcgagc agctttgtg cagtcgtgat ttaacctggac gtgctcttct ccacggcctc cataatgac ctctgcgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaagc</p>	Homo sapiens

12	NP_000612.1	5-HT2A Receptor	MDILCEENTS LSSTNSLMQ	LNDDTRLYSN DFNSEANTS	DAFNWTVDSSE	NRTNLSCEGC	P	Homo sapiens
132			LSPSCLSLH LQEKNSALI	TAVIILITIA GNILVIMAVS	LEKKLQNATN	YFLMSLAID		
			atatttgaaa atcattgtctg ttgggaccat atcagtaggt ataccatgc caataccagt					
			ctttgggcta caggacgatt cgaaggtctt taaggagggg agttgcttac tcgccgatga					
			taactttgtc ctgatacggt cttttgtgtc attttcatt cccctaacca tcatgtgat					
			cacctacttt ctaactatca agtcactcca gaaagaagct cttctccct cagagttctt tgtcttcaga					
			tggcacacgg gccaaattag cttctttcag gacaggtcc tacacaggca ggaggactat					
			aaagctcttc cagcggtcga tccataggga caaggtcgtg ggcacgtctc tcttctgtt					
			gcagtcacac agcaatgagc aaaaggcatg aacatcatcg gccgtcatct gcaaaagatc					
			tgtgtgtgat tgggtgccct tcttctacac caatgtgttt gttggatcg gttatctctc					
			ctgcaatgag gatgtcattg gggccctgct caatgtgttt gttggatcg gttatctctc					
			ttcagcagtc aaccacactg tctacacact gttcaacaag acctataggt cagccttttc					
			acggtatatt cagtgtcagt acaaggaaa caaaaacca ttgcagttaa tttagtgaa					
			cacaataccg gotttggcct acaagtcctag ccaactcaa atgggacaaa aaagaattc					
			aaagcaagat gccaaagaca cagataatga ctgtcctag gttgctctag gaaagcagca					
			ttctgaagag gcttctaaag acaatagcga cggagtgaat gaaaaggatg gctgtgtgtg					
			ataggctagt tggcgtggca actgtggaag gcacactgag caagttttca cctatctgga					
			aaaaaaaat atgagattgg aaaaaattag acaagtcctag tggaaaccaac gatcatatct					
			gtatgctcca ttttattctg tcaatgaaa cgggggttca atgtacaaa atgtgtgctt					
			ggaaaatggt ctgacagcat ttcagctgtg agcttcttga tacttattta taacattgta					
			aatgatattg ctttaaaaatg attcaccttt atgttataat tatgaagccc taagtaaatc					
			taaatatact tctattttca agtggaacc ttgtgtctat cgtgttccat gatgacatgg					
			gattgagttg gttacctatt gccgtaata aaaaatagta taaatagta aaattttatt					
			gaatataatg gctctttaa aattatctt aaaaacttact atggtatata ttttgaagg					
			agaaaaaaa aaagccacta aggtcagttg tataaaatct gtattgtctaa gataatbaaa					
			tgaataactt gacaacattt ttcatagata ccatittgaa atattcacia ggttgtgtggc					
			atttgcctga tttcaagtta attctcagaa gtgaaaaaga cttcaaatgt tattcaataa					
			ctattgtctg tttctcttct acttctgtg ctttactctg aattccagt gtggtcttgt					
			ttaatatttg ttctcttagg taaactagca aaagatgat ttaacattac caaatgcctt					
			tttagcaatt gcttctctaa acagcacta tcgaggtatt tggtaacttg ctgtgaaatg					
			actgcatcat gcatgcactc ttttagcag taaatgtata ttgatgtaac tgtgtcaggga					
			ttgaggatga actcaggttt ccggctactg acagtggtag agtcctagga catctctgta					
			aaaagcaggt gactttccta tgacactcat caggtaaact gatgctttca gatccatcgg					
			tttatactat ttattaaaac cattctgctt ggtccacaa tcatctattg agtatacatt					
			tatgtgtgaa gcaaatctct agatagaga aatataaaa taattaaaac aaaatccttg					
			ccttcaaacg aaatggctcg gccaggcacg gagctcgtg catgtaatcc tagcactttg					
			ggaggctgag atgggaggat cacttgaggc caagagtttg agaccaacct gggtacaaca					
			gtgagacctc cctgtctcta caaaaaaat caaaaaatta tctgatcctt gtggcacaca					
			actgtgtgtcc cagctacagg ggaggctgag acgcaaggat cacttgagcc cagaagctca					
			aggctgcagt gagccaagtt cacaccactg ccatttctc ctgggcaaca gagtgaagcc					
			ctatcacccc gaattc					



13	133	5-HT2B Receptor	NM_000867	<p>MLLGFLVMPV SMLTILGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRENSRT KAFKIIIAVW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNFVLIGSF  VSFFIPLTIM VITYFLTIS LQKEATLCVS DLGTRAKLAS FSFLPOSSLS SEKLFQRSIH  REPGSYTGRR TMOISNEQK ACKVLGIVFF LFVVMWCPFF ITNIMAVICK ESCNEDVIGA  LLNVFWIGY LSSAVNPLVY TLFNKTYRSA FSRYIQCOYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEASKDN SDGVNEKRVSC V  tactaaccat gctgaccact gttcggaaag ggtatgaatc acagaaaaac agcaaatggc A  tctctcttac agagtgtctg aacttcaaaag cacaattcct gacgaatcatt tgcagagcac  ctttgttcac gttatctctt ctaactgtgtc tggattacag acagaaatcaa taccagagga  aatgaacacag attgttgagg aacagggaag taaactgcac tggcagctc tttcgtatct  catggtgata ataccacaaa ttggtggaaa taccottgtt attctggctg tttcactgga  gaagaagctg cagtatgcta ctaattactt tctaagtcc ttggcgtgtg ctgatttgct  ggttggtattg ttgtgatgc caattgccct ctgacaata atgtttgagg ctatgtggcc  ctccaccatt gttctatgct ctgctgtgtt atttcttgac gttctctttt caaccgcatc  catcatgcat ctctgtgcca ttctagtga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtgggttaat  ttcaataggc attgccattc cagtccttat taaagggata gagactgatg tggacaaccc  aaacaatatc acttgtgtgc tgacaaagg aactgtgtgc gatttcacgc tctttggctc  actggctgctc ttcttcacac ctcttgcaat ctcttgcaat aactcaagcc taacatgggtt  tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatgggtt  gactgtgtct acagttttcc aaagggatga aacacctgac tctgcacccg aaaaggtggc  aatgtctgat ggttctcgaa aggacaaggc tctgcccac tcaggtgatg aaacattat  gcgaagaaca tccacaattg ggaacaaagtc agtgcagacc atttccaaag aacagagagc  ctcaaaaggtc ctagggtattg tgtttttcct ctttttgctt atgtgtgtgc cttcttttat  tacaaatata acttttagttt tatgtgattc ctgtaaccaa actactctcc aaatgctcct  ggagatatatt gtgtggatag gctatgttct ctgaggagtgc aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttgg cagatatatc acctgcaatt accgggccac  aaagtcagta aaaactctca gaaaacgctc cagtaagatc tacttcogga atccaatggc  agagaactct aagtttttca gaaaacatgg aattcgaaat ggtattaaac ctgccatgta  ccagagtcca atgagggtcc gaagtccaac cattcagctc tcatcaatca tttcactaga  tacgcttctc ctcaactgaa atgaaggatga caaaactgaa gagcaagtta gttatgtata  gcgaactgg cagttgtcat caacataat gatgagtaag atgatgaatg agatgtaaat  gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaaact  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga  aaataatttt atatagctac aaatgaaaaa aatccagcac tctggttaaa ttttaaggta  ttcgaatgaa ataaagtcaa atcaataaat ttcaggctttt aaaaaaaaa  MALSYRVSEL QSTIPEHILQ STFVHVISSN WSGLQTESIP EEMQIIVEEQ GNKLHWAALL P  ILMVIPTIG GNTLVILAVS LEKKIQYATN YFLMSLAVD LLVGLFVMPI ALLTMFEAM  WPLPLVLCPA WLFLDVLFST LEKKIQYATN VDRYIAIKKP IQANQVNSRA TAFIKITVW  LISIGIAPV PIKGIETDWD NPNNITCVLT KERFGDFMLF GSAAFFFTPL AIMIVTYFLT  IHALQKKAYL VRNKPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MLSGFLVMPV SMLTILGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS LDRYVAIQNP  IHHSRENSRT KAFKIIIAVW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNFVLIGSF  VSFFIPLTIM VITYFLTIS LQKEATLCVS DLGTRAKLAS FSFLPOSSLS SEKLFQRSIH  REPGSYTGRR TMOISNEQK ACKVLGIVFF LFVVMWCPFF ITNIMAVICK ESCNEDVIGA  LLNVFWIGY LSSAVNPLVY TLFNKTYRSA FSRYIQCOYK ENKKPLQLIL VNTIPALAYK  SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEASKDN SDGVNEKRVSC V  tactaaccat gctgaccact gttcggaaag ggtatgaatc acagaaaaac agcaaatggc A  tctctcttac agagtgtctg aacttcaaaag cacaattcct gacgaatcatt tgcagagcac  ctttgttcac gttatctctt ctaactgtgtc tggattacag acagaaatcaa taccagagga  aatgaacacag attgttgagg aacagggaag taaactgcac tggcagctc tttcgtatct  catggtgata ataccacaaa ttggtggaaa taccottgtt attctggctg tttcactgga  gaagaagctg cagtatgcta ctaattactt tctaagtcc ttggcgtgtg ctgatttgct  ggttggtattg ttgtgatgc caattgccct ctgacaata atgtttgagg ctatgtggcc  ctccaccatt gttctatgct ctgctgtgtt atttcttgac gttctctttt caaccgcatc  catcatgcat ctctgtgcca ttctagtga tctgtacata gccatcaaaa agccaatcca  ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtgggttaat  ttcaataggc attgccattc cagtccttat taaagggata gagactgatg tggacaaccc  aaacaatatc acttgtgtgc tgacaaagg aactgtgtgc gatttcacgc tctttggctc  actggctgctc ttcttcacac ctcttgcaat ctcttgcaat aactcaagcc taacatgggtt  tgctttacag aagaaggctt acttagtcaa aaacaagcca cctcaacgcc taacatgggtt  gactgtgtct acagttttcc aaagggatga aacacctgac tctgcacccg aaaaggtggc  aatgtctgat ggttctcgaa aggacaaggc tctgcccac tcaggtgatg aaacattat  gcgaagaaca tccacaattg ggaacaaagtc agtgcagacc atttccaaag aacagagagc  ctcaaaaggtc ctagggtattg tgtttttcct ctttttgctt atgtgtgtgc cttcttttat  tacaaatata acttttagttt tatgtgattc ctgtaaccaa actactctcc aaatgctcct  ggagatatatt gtgtggatag gctatgttct ctgaggagtgc aatcctttgg tctacacct  cttcaataag acatttcggg atgcatttgg cagatatatc acctgcaatt accgggccac  aaagtcagta aaaactctca gaaaacgctc cagtaagatc tacttcogga atccaatggc  agagaactct aagtttttca gaaaacatgg aattcgaaat ggtattaaac ctgccatgta  ccagagtcca atgagggtcc gaagtccaac cattcagctc tcatcaatca tttcactaga  tacgcttctc ctcaactgaa atgaaggatga caaaactgaa gagcaagtta gttatgtata  gcgaactgg cagttgtcat caacataat gatgagtaag atgatgaatg agatgtaaat  gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaaact  aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga  aaataatttt atatagctac aaatgaaaaa aatccagcac tctggttaaa ttttaaggta  ttcgaatgaa ataaagtcaa atcaataaat ttcaggctttt aaaaaaaaa  MALSYRVSEL QSTIPEHILQ STFVHVISSN WSGLQTESIP EEMQIIVEEQ GNKLHWAALL P  ILMVIPTIG GNTLVILAVS LEKKIQYATN YFLMSLAVD LLVGLFVMPI ALLTMFEAM  WPLPLVLCPA WLFLDVLFST LEKKIQYATN VDRYIAIKKP IQANQVNSRA TAFIKITVW  LISIGIAPV PIKGIETDWD NPNNITCVLT KERFGDFMLF GSAAFFFTPL AIMIVTYFLT  IHALQKKAYL VRNKPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	LMRRSTIGK KSVQTSISNEQ RASKVLGIVF FLFLMWCPF FITNITVLVC DSCNQTLQOM LLEIFVWIGY VSSGWNPLVY TLENKTERDA FGRYITCNRYR ATKSVKTLRK RSSKIYFRNP MAENSKFFKK HGIRNGINPA MYQSPMLRS STIQSSSIIL LDLLLLTENE GDKTEEQVSY V	accgcgcga ggtaggcgt ctggtgcttg cggaggacgc ttccttcctc agatgcaccg A atcttcccga tactgccttt ggagcgcta gatgctagc cttggctgct ccattggcct gccttgcccc ttacctgcg attgcataag aactcttctt ctgtctgtac atcgctgtcg tcggagtcgt cgcgatcgtc gtggcgctcg tgtgatggc ttcgtccgtt tagagtagtg tagttagtta ggggccaacg aagaagaaag aagacgcgat tagtgcagag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaaa gagccaaacc tagccggggg gcgcacggtc acccaaggga ggtcgactcg ccggcgcttc ctatcgcc gagctccctc cattctctc cctccgcga ggcgcgaggt tgcggcgcg agcgacgc agctcagcgc accgactgcc gcgggctccg ctggcgatct gcagcgaggt ccgtttctcg tctagctgcc gcgcggcgga ccgctgcctg gtcttctcc cggacgctag tgggttatca gctaacaccc gcgagcatct ataacatagg ccaactgacg ccatccttca aaacaaacta aaggatgata tgatgaacct agcctgttaa ttctgtcttc tcaatttaa actttggttg cttaaagactg aagcaatcat ggtgaacctg aggaatgcgg tgcattcatt ctttgtgcac ctaattggcc tattggttg gcaatgtgat attctgtga gccagtagc agctatagta actgaacttt tcaataacct cgatggtgga gccttcaaat tcccagacgg ggtacaaaac tggccagcac tttcaatcgt catcataata atcatgaca tagtgggcaa catccttgat atcatggcag taagcatgga aaagaaactg cacaatgcca ccaattactt cttaattgct ctagecattg ctgatatgct agtgggacta cttgtcatgc cctgtctct cctggcaatc ctttatgatt atgtctggcc actacctaga tatttgctgc cgtctggat tcttttagat gttttatctt caacagcgtc catcatgcac ctctgcgcta tatcgctgga tcggtatgta gcaatacgt atcctattga gcatagcct ttcaattcgc gactaaagg catcatgaag attgctattg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaagggtgt cgtgaacaac acgacgtgcg tgcataacga ccaaatctt gttcttattg ggtccttcgt agctttcttc ataccgtga cgtattatgt gattacgtat tgcctgacca tctacgttct gcgcgacaa gctttgatgt tactgcacgg ccacaccgag gaaccgctg gactaaagtct ggatttctg aagtgcgtga agaggaatc ggccgaggaa gagaactctg caaacccctaa ccaagaccag aacgcacgc gaagaaagaa gaaggagaga cgtccctagg gcaccatgca ggctatcaac aatgaagaa agcttcgaa agtccctggg attgtttct ttgtgtttct gatcatgttg tgcctatttt tcattacca tattctgtct gttctttgtg agaagtcctg taaccaaaag ctcatgaaa agcttctgaa tgtgtttgtt tggattggct atgtttgttc aggaatcaat cctctgtgt atactctgt caacaaaatt taccgaaggg cattctcaa ctatttgcgt tgcaattata aggtagagaa aaagcctcct gtcaggcaga ttccaagagt tgcgcacct gctttgtctg ggaggagagt taatgttaac attatcggc ataccaatga accggtgatc gagaagacca gtgacaaatga gcccggtata gagatgcaag ttgagaattt agagttacca gtaaatccct acagttggt tagcgaaagg attagcagtg tgtgagaaag aacagcacag tcttttctca cggtaacaag tacatatgta ggaattttt ctctttaat ttttctgttg gtcttaacta atgtaaatat tgctgtctga aaaagtgtt	Homo sapiens
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16	134	NP_000859.1	5-HT2C Receptor	ctaatctctg tatgttatcc actacaggtt ttatgagact tcttattaat ttattaaatt tattaaatg tgaataaaaa aaaaaaaaaa aaaaa MVNLNNAVHS FLVHLIGLIV WQCDISVSPV AAIVTDIFNT SDGGRFKFPD GVQNPALSI P VIIIIMTIGG NILDVIMAVSM EKKLHNATNY FLMSLAIADM LVGLLVMPLS LLAILDYVW PLPRYLCPVW ISLDVLFSTA SIMHLCAISL DRYVAIRNPI EHSRENSRTEK AVMKIAIWWA ISIGVSVPIP VIGLRDEEKV FVNNTCVLN DPNFVLISGF VQDFIPLTIM VITYCLTIYV LRRQALMLLH GHTEEPGLS LDFLKCKCRN TAEENSANP NQDONARRRK KKERRPRGTM QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVLCEKS CNQKIMEKLL NVFVWIGYVC SGINPLVYTL FNKIYRRAFS NYLRNYKVE KKPPVRQIPR VAATALSGRE LNVNIYRHTN EPVTEKASDN EPGIEMQVEN LELPNPSSV VSERISSV	Homo sapiens
17	136	NM_000870	5-HT4 Receptor	cggtgcttat ttctgtaat ggacaaactt gatgtaatg tgagtctga ggagggtttc A gggtcagtgg agaaggtggt gctgctcacg ttctctcga cggttatcct gatggccatc ttggggaacc tgcgtggtgat ggtggctgtg tgctgggaca ggcagctcag gaaaaataaaa acaaattatt tcaattgatac tcttgctttt gctgatactgc tggtttcggt gctggtgatg cccttggtg ccattgagct ggtcaagac atctggattt atggggaggt gtttctctt gttcggacat cctggacgt cctgctaca acgcatcga ttttccact gtgctgcat ttcttgata ggtattacg catctgtgc cagccttgg tctataggaa caagatgacc cctctgcga tgcattaat gctggaggg gctgggtga tccccagtt tattttttt ctccctataa tgcaaggctg gaataacatt ggataatg attgataga aaagaggaag ttcaaccaga actctaactc tacgtactgt gtcttcattg tcaacaagcc ctacgccatc acctgctctg tgggtgacct ctacatccca ttctctcga tgggtctggc ctattaccgc atctatgtca cagctaaaga gcatgccat cagatccaga tgttacaacg ggcagagacc tctccgaga gcaggccctca tgcggcagac cagcatagca ctcatgcat gaggacagag accaaaagcag ccaagacctt gtgcatactc atgggttgc tctgcctctg ctggcacca ttctttgtca ccaatattgt ggatccttc atagactaca ctgtccctgg gcaggtgtgg actgctttcc tctggtcgg ctatatcaat tccgggtga accctttct ctacgccctc ttgaataagt cttttagacg tgcctctctc atcatcctct gctgtgata tgagcgctac cgaagacctt ccattctggg ccagactgtc ccttgttcaa ccacaacct taatggatcc acacatgtac taaggatgc agtgagatgt ggtggccagt gggagagta gtgtcacccg ccagcaactt ctctttggt ggctgctcag ccagtgaca cttaggcccc tgggacaaatg accagaaga cagccatgcc tccgaaagag gccaggtcc taagctgctg cttgtgcg actgcacccg gcattctctt cacttgaggc ttccctccg ccagtgcagg aaccggtgc tcgctggg	Homo sapiens
18	136	NP_000861.1	5-HT4 Receptor	MDKLDANVSS EEGFGSVEKV VLLTFLSTVI LMAILGNLIV MVAVCWDRQL RKIKTNYFIV P SLAFADLLVS VLVMPFGAIE LVQDIWIYGE VFCLVRTSLD VLLTTASIFH LCCSIDRYY AICCCQLVYR NKMTPLRIAL MLGCGWVPT FISFLPMQG WNNIGIIDLI EKRKNQNSN STYCVFMVWK PYATCSVVA FYIPELLMLV AYRIYVTA EHAHQIOMLQ RAGASSESRP QSADQSHSTR MRTEKRAKT LCIINGCFCL CWAPFFVTNI VDPFIDYVTP GQVWTAFLWL GYNSGLNPF LYAFLNKSFRA FLIILCCD DERYRPSIL GQTVPCSTTT INGSTHVLRD AVECGQWES QCHPPATSPL VAAQPSDT	Homo sapiens
19	138	NM_000871	5-HT6	cccgagagcg cccattcacc cccctcacc accctccccg gtccaccatt ccccgcactc A	Homo

Receptor	138	5-HT6 Receptor	NP_000862.1	<p> tgacccggcc ggacgccect cccctatctt gcgcgccgcc cccctccagg ggctctgtctc  ccacccagg gagcccatcc gacctgtgt tgaactcccg ccgttccct caggggctc  ggctcatcg gtgcctctcc ccaacttcc aaccgtttg ctccaggagt tctgcccc  tccccaggg cgccccaaata gccacactgt gtctctctgt agtcgcgcgc cctgacct  gcgagacca gcgccccgc ccatgtcccc ccaactacat cccccgggg gcgtggtgag  tcgcggtctg ttctcaaggga cggctccctg gtcacccctc ggtcctcatg gtcccagagc  gcttccgc caccatata ctccttgcc ggcgggagc ggcgcgtcg gcccggggg  cgcgcccaac cgccaatagc acccgccct gggtggcagc gctgacgagc gcggccaaact  gcagcggtg ggtggcgcc gcgtgtgag tggtcatcgc gctgacgagc gcggccaaact  cgctgtgat cgcgtctatc tgacctcagc cgcgctgag caacacgtcc aacttctcc  tggtgtcgt cttcacgtct gacctgatg tggggtgtg cgtgctgctc cgggccatgc  tgaacgcgt gtacgggccc ggtgtgtg cgcggggcct ctgctgtctc tggaccgct  tcgacgtgat gtgctgagc gctccatcc tcaacctctg cctcatcagc ctggaccgct  acctgtcat cctctgcgc ctgcgtaca agtgcgcac gacgccccg cgtgccccg  ccctagtctt gggcgctgg agctgcgc ctctgcctc cttcctgcc ctgctgtg  gctggcacga gctgggccc gacggccc cgtccctgg ccagtgcgc ctgctggcca  gcctgcctt tgccttggt gcgtgggccc tcaactctt cctgccctg ggtgccatat  gcttacctc ctgcaggatc ctgctagtgc ccgcaagca ggcgtgagc gttgcccc  tcacacccg catgcccagt caggctctgg agcgtctga ggtgcccag accccaagcc  cagggttga gtctgtgac agcaggctc tagccacgaa gcacacagc aagccccga  agggcagcct gacgtgggc atcctgtgg gcatgttct tgtgacctg ttgccccct  ttgtggccaa catagtccag gccgtgtgc actgcatctc ccagggcctc ttcgatgtcc  tcacatggt ggttactgt aacagcaca tgaaccccat catctacca ctctcatgc  gggactcaa gcgggcgtg ggcaggttcc tgcatgtcc agctgtccc cgggagcgcc  agggcagcct ggcctgcga tcactgcga cctctcagc cggcccccg cccggcctta  gcctacagca ggtgctgcgc ctgccccgc cgcgggactc agattcggac tcagacgcag  gctcaggcgg ctctcgggc ctgaggctca cggccagct gctgcttct ggcgaggcca  cccaggacc ccgctgcc accaggcgc ctgcgcctg caattcttc aacatcgacc  ccgcgagcc cagctgcgc ccgcatcac ttggcatccc cagaaactga cccgggttg  ggctggcca atggggagct ggattgagc gaaccagac cctgagtctc tgggccagct  cttggctaag accaggagg tgcaagtctc tagaagccc tctgagctcc agagggtgc  gcagagctga cccctgctg ccatctccag gcccttacc tgcagggatc atagtgtact  caga </p>	<p> sapiens </p>
20	138	5-HT6 Receptor	NP_000862.1	<p> MVPEPGPTAN STPAWGAGPP SAPGSGWVA AALCVIALT AAANSLIAL ICTQPALRNT P  SNFFVLSFT SLMVGLVM PPAMNLALY RNVLARGLCL LWTAFDVMCC SASILNLCIL  SLDRYLLILS PLRYKLRTMP LRALALVIGA WSLAALASFL PLLIGWHELH HARPPVPGQC  RLIASLPFVL VASGLTFFLP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETLOVP  RTPRPGVESA DSRRLATKHS RKALKASITL GILLGMFFVT WLPFFVANIV QAVDCISPG  LFDVLTWLG CNSTMNPIY PLFMRDFKRA LGRFLPCPRC PRERQASLAS PSRLTSHSGP  RPLSLQQVL PLPLPPDSDS DSDAGSGGSS GLRLTAQLLL PGEATQDPPL PTRAAAVNF  FNIDPAEPEL RPHLGIPTN </p>	<p> Homo sapiens </p>

21	139	5-HT7 Receptor	NM_000872	<p>ccatgggcag cggcacacgg cggcgcgatg atggacggtta acagcagcgg ccgcccggac  ctctacgggc acctccgctc ttctcttctg ccagaagtgg ggcgcgggct gcccgacttg  agccccgacg gtggcgccga cccggtcgcg ggtcctctgg cgcgcacact gctgagcgag  gtgacagcca gcccgcgcc cactctggac cactctggac ggcgccccg acaatgcctc cggctgtggg  gaaacagatca actacggcag agtcgagaaa gttgtgatcg gctccatcct gacgctcatc  acgtgtctga cgatcgcggg caactgcctg gtggtgatct cagtgtgctt cgtcaagaag  ctccgccagc cctccaacta cctgatcggt tccctggcgc tggccgacct ctcggtggct  gtggcggtca tgcctctcgt cagcgtcacc gacctcatg ggggcaagt gatctttgga  cacttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacggc ctcgatactg  acctgtgctg tgatcagcat tgacaggtac ctgggatca caaggccct cactacccct  gtgagggcaga atgggaaatg catggcgaaag atgattctct cagtctggt tctctcggc  tccatcacct tacctccact ctttggatgg gtcagaatg taaatgatga taagtgtgc  ttgatcagcc aggaactttg ctatacgatt tactctaccg cagtggcatt ttatatcccc  atgtccgtca tgcttttcat gtactaccag atttacaagg ctgccaggaa gagtctggc  aaacacaagt ttcttggtt cctctgagt ggcagacaca cgtcatcgc cctgaatggc  atagtgaagc tccagaagga ggtggaagag tgtgcaaac ttctgagact cctcaagcat  gaaaggaaaa acatctccat ctttaagcga gaacagaaag cagccaccac cctggggatc  atcgtcgggg cctttaccgt gtgctggctg ccatttttcc tctctcgac agccagaccc  ttcatctgtg gcacttccgt cagctgcac ccaactgtgg tggagaggac atttctgtgg  ctagggtatg caaactctct cattaacctt ttatatatag ccttcttcaa cggggacctg  aggaccacct atcgcagcct gctccagtgc cagtaccgga atatcaaccg gaagctctca  gctgcaggca tgcataagc cctgaagcct gctgagaggc cagagagacc tgagttgtg  ctacaaaaatg ctgactactg tagaaaaaa ggtcatgatt catgattgaa agcagaacaa  tgagag</p>	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	<p>MDVNSSGRP DLYGHLRSL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASAPTW P  DAPPDNASGC GEQINYGRVE KVIIGSILTL ITLLTIAGNC LVVISVCFVK KLRQPSNYLI  VSLALADLSV AVAVMPFVSVD TDLIGGKWIF GHFCNVFIA MDVMCCTASI MTLCVISIDR  YLGITRPLTY PVRQNGKMA KMILSWLLS ASITLPPFLG WAQNVNDDKV CLISQDFGYT  IYSTAVAFYI PMSVLMFYI QIYKAARKSA AKHKFPFPR VEPDSVIALN GIVKLOKEVE  ECANLSRLK HERKNISIFK REQKAATLIG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC  IFLWVERTFL WLGYANSLIN PFIYAFENRD LRTYRSLIQ CQYRNINRKL SAAGMHEALK  LAERPERPEF VLQADYCRK KGHDS</p>	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	<p>atgagtgtca gaagtgtgaa ggtgctctgt tctgaatccc agagcctcct ctcctcttgt A  gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga gtagcggct  gctgaaggcg tcgaggtgtg ggggcaacttg gacagaacag tcaggcagcc gggagctctg  ccagctttgg tgaccttgg cgggctggg agcgtcgcg agcgagccgg aggaactatga  gctgccgcg gttgtccaga gccagccca cctgacgcg cgcggcccg agctctgttc  ctgggaactt tgggcactgc cctgggacc cctgcggcc agcaggcagg atggtgcttg  cctcgtgccc cttggtgcc gtctgctgat gtgccagcc tgtgccggc atgccgccc  ccatctcagc ttccaggcc gcctacatcg gcctcaggt gctcatgcc ctggtctctg  tgccccggaa cgtgctggtg atctggcgcg tgaagtgaa ccaggcgctg cgggatgcca</p>	Homo sapiens

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24 Adenosine A1 NP\_000665.1 MPPSISAFQA AYIGIEVLIA LVSVPGNVLV IWAQVQAL RDAFFCIVS LAVADVAVGA P Homo

25	273	Receptor	Adenosine A2a Receptor	NM_000675	<p>                     LVIPLAAILN IGPQTYFHTC LMVACPVLLI TQSSILALLA IAVDRYLVRK IPLRYRMVVT                      PRRAAVAIAG CWILSFVUGL TPMFGWNLS AVERAWAANG SMGEPVIKCE FEKVISMEYM                      VYENFFWVL PPLLLMLVIY LEVFLIRKQ LNKVVSASSG DPQKYGKEL KIAKSLALIL                      FLFALSWLPL HILNCITLFC PSCHKPSILT YIAIFLTHGN SAMNPVYAF RIQKFRVTFE                      KIWNDFHRCQ PAPPIDEDLP EERPD                      ttgtcaggtg cctcaggaac cctgaagctg ggtgagacca tgatgtgtct gccagaaccc A                      ctgcagaggg cctgggtttca ggagactcag agtctctgt gaaaaagccc ttggagagcg                      cccagcagg gctgcacttg gctcctgtga ggaaggggct gaggggtctg ggcctctccg                      cctgggcccg gctgggagcc aggcggcggtg ctgggctgca caaatggacc gtgagctggc                      ccagcccggt tccgtgctga gctgctgtg cgtctgtggc catgcccac atgggtctct                      cgtgtacat caoggtggag ctggccattg ctgtgctggc catcctgggc aatgtgtgtg                      ttgtgtgggc cgtgtggctc aacagcaacc gcagtgggtg tgcctgacct cccctttgcc tttgtgtgt                      cactggcgcc ggcgcacatc gcagtgggtg tgcctgtcat gtcctgtctc gtccgtgtcc                      gcaccgggtt ctgcgctgcc tgccacggct gctctgtcat gtcctgtctc gtccgtgtcc                      tcacgcagag ctccatcttc agtctctgg ccacgtgcat tgaccgtac attgcccac                      gcaccccgct ccggtacaat ggcttgggtg gccatgggcc tgaactccat gctagggttg acaactgctg                      ttgtgtgggt gctgtgcttt gccatgggcc agcactccc aggtctctgg ggagggccaa gtggcctgtc                      gtccagccaa ggagggcaag aaccactccc aggtctctgg ggagggccaa gtggcctgtc                      tctttgagga tgtgtgccc atgaactaca tgggtgactt caacttcttt gctgtgtgct                      ttgtgcccc gctgtctatg ctgggtgtgt atttgctgt cttcctggcg gcggaagac                      agtgaagca gatggagagc cagcctctgc cgggggagcg ggacaggtcc acactgcaga                      agaggtcca tgcctgcaag tcaatggcca tcaatgtggg gctctttgcc ctctgtgtgc                      tgcccttaca catcataac tgccttcaat tcttctgccc cgaactgcag cagccccctc                      tctgtgtcat gtacctggcc atcgtctctc ccacacacaa ttggtgtgtg aatcccttca                      tctacgcta ccgtatccg gagtctcgc agactctcc caagatcatt cgcagccacg                      tctgaggca gcaagaacct ttcaaggcag ctggcaccag tgcccgggtc ttggcagctc                      atggcagtga cggagagcag gtacagctcc gtctcaacgg ccaccggcca ggagtgtggg                      ccaacggcag tgctccccac cctgagcgga ggcctaatgg ctatgcccgt gggtgtgtga                      gtggagggag tgcccaagag tcccagggga acacgggctt cccagacgtg gagtctctta                      gccatgagct caagggagtg tgccagagc ccctggctt agatgacccc ctggcccagg                      atggagcagg agtgcctga tgattcatgg agtttgccc ttctaaagg aaggagatct                      ttatctttct ggttggcttg accagtccag ttgggagaag agagagagtg ccaggagacc                      ctgagggcag ccggttctca ctttgactg agagaaggga gcccaggct ggagcagcat                      gaggcccgag aagaaggct tgggttctga ggaagcagat gtttcatgct gtgagccctt                      gcaccaggtg ggggccacag caccctgtct ccacagagca gcttggggcac agcagactgg                      gcagaagcat ctggaagcac cacttgtct ccacagagca gcttggggcac accactctcc                      cctggccctg agactgggga gtggttccaa tagcctctg ccaccacac accactctcc                      ctgactctc ctagggttca ggagctgtg ggccagagtg tgacatttga ctttttoca                      ggaaaaatgt aagtgtgagg aaacctttt tattttatta cctttcactc tctggtgtgt                      ggtgtgtccg tgggtctgct gcctaacctg gcaccagagc ctctgcccgg ggagcctcag                      ggaactctc cctgtgtgca cagctgacct ccaacttcta gtcccaggcg catctcttgg                 </p>	sapiens
					<p>                     ttgtcaggtg cctcaggaac cctgaagctg ggtgagacca tgatgtgtct gccagaaccc A                      ctgcagaggg cctgggtttca ggagactcag agtctctgt gaaaaagccc ttggagagcg                      cccagcagg gctgcacttg gctcctgtga ggaaggggct gaggggtctg ggcctctccg                      cctgggcccg gctgggagcc aggcggcggtg ctgggctgca caaatggacc gtgagctggc                      ccagcccggt tccgtgctga gctgctgtg cgtctgtggc catgcccac atgggtctct                      cgtgtacat caoggtggag ctggccattg ctgtgctggc catcctgggc aatgtgtgtg                      ttgtgtgggc cgtgtggctc aacagcaacc gcagtgggtg tgcctgacct cccctttgcc tttgtgtgt                      cactggcgcc ggcgcacatc gcagtgggtg tgcctgtcat gtcctgtctc gtccgtgtcc                      gcaccgggtt ctgcgctgcc tgccacggct gctctgtcat gtcctgtctc gtccgtgtcc                      tcacgcagag ctccatcttc agtctctgg ccacgtgcat tgaccgtac attgcccac                      gcaccccgct ccggtacaat ggcttgggtg gccatgggcc tgaactccat gctagggttg acaactgctg                      ttgtgtgggt gctgtgcttt gccatgggcc agcactccc aggtctctgg ggagggccaa gtggcctgtc                      gtccagccaa ggagggcaag aaccactccc aggtctctgg ggagggccaa gtggcctgtc                      tctttgagga tgtgtgccc atgaactaca tgggtgactt caacttcttt gctgtgtgct                      ttgtgcccc gctgtctatg ctgggtgtgt atttgctgt cttcctggcg gcggaagac                      agtgaagca gatggagagc cagcctctgc cgggggagcg ggacaggtcc acactgcaga                      agaggtcca tgcctgcaag tcaatggcca tcaatgtggg gctctttgcc ctctgtgtgc                      tgcccttaca catcataac tgccttcaat tcttctgccc cgaactgcag cagccccctc                      tctgtgtcat gtacctggcc atcgtctctc ccacacacaa ttggtgtgtg aatcccttca                      tctacgcta ccgtatccg gagtctcgc agactctcc caagatcatt cgcagccacg                      tctgaggca gcaagaacct ttcaaggcag ctggcaccag tgcccgggtc ttggcagctc                      atggcagtga cggagagcag gtacagctcc gtctcaacgg ccaccggcca ggagtgtggg                      ccaacggcag tgctccccac cctgagcgga ggcctaatgg ctatgcccgt gggtgtgtga                      gtggagggag tgcccaagag tcccagggga acacgggctt cccagacgtg gagtctctta                      gccatgagct caagggagtg tgccagagc ccctggctt agatgacccc ctggcccagg                      atggagcagg agtgcctga tgattcatgg agtttgccc ttctaaagg aaggagatct                      ttatctttct ggttggcttg accagtccag ttgggagaag agagagagtg ccaggagacc                      ctgagggcag ccggttctca ctttgactg agagaaggga gcccaggct ggagcagcat                      gaggcccgag aagaaggct tgggttctga ggaagcagat gtttcatgct gtgagccctt                      gcaccaggtg ggggccacag caccctgtct ccacagagca gcttggggcac agcagactgg                      gcagaagcat ctggaagcac cacttgtct ccacagagca gcttggggcac accactctcc                      cctggccctg agactgggga gtggttccaa tagcctctg ccaccacac accactctcc                      ctgactctc ctagggttca ggagctgtg ggccagagtg tgacatttga ctttttoca                      ggaaaaatgt aagtgtgagg aaacctttt tattttatta cctttcactc tctggtgtgt                      ggtgtgtccg tgggtctgct gcctaacctg gcaccagagc ctctgcccgg ggagcctcag                      ggaactctc cctgtgtgca cagctgacct ccaacttcta gtcccaggcg catctcttgg                 </p>	Homo sapiens



[illegible]

28	274	Adenosine A2b Receptor	NP_000667.1	MLETQDALY VALELVIAL SVAGNVLVCA AVGTANTLQT PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLE LACFVLVLTQ SSIFSLAVA VDRYLAICVP LRYKSLVTGT RARGVIAVLW VLAFIGIGLTP FLGWNKSDSA TNNCTEPWDG TTNESSCLVK CLFENVVPM YMYENFFGC VLPPLIMLV IYIKIFLVAC RQLQTELMQ HSRTTIQREI HAAKSLAMIV GIFALCWLVP HAVNCVTLFQ PAQGNKPKM AMNMAILLSH ANSVNPIVY AYRNRDFRYT FHKIISRYLL QOADVKSGNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	ctctttgctg caaaggctg gtagggctg tgetcagcaa agcgtcaact cgtgcaagaa A cttagcagga atagttctg ctaaggctag gagctgcca ccaaggtctc tttttgttc ctctgcttct cccgtttgcc tctttatcat gagatcttt tgctaagctg gcagaaagat tgcatagtca gtgcttccag ctctgctccc acctgacct gcatgtctct ctggtccctg aatgaatgaa ctctgatacc caatctgtc tctgacctc tctatgccac tcatggctcc tcttctgctc ttccatctt ttgtctgaga gtctgtgact ctgtacttcc tcttgccca tctcaattcc tgaacacccc ctgaagaggg ttgtttatct tgatggaact caaaagccca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcaact tcagattcag tccatataga gctgtccctac agcatctgg aacttgagg atgtgcggtg cataaagggg ctggaagtga cccacctgtg atgagccctt tctaaggaga aggtttcca agagatcacc ccaccagaaa agggtaggaa tgagcaagtt gggaaattta gactgtcact gcacatggac ctctgggaag agctgtggcg agagctaggc ccaactggccc tacagcggga tcttgctggc tcacctgtcc ctgtggaggt tcccctggga aggcaagatg cccaacaaca gcaactgctct gtcaattggc aatgtacct acatcaccat ggaattttc attgactct gcgcatagt gggcaacgtg ctggtcatct gcgtggtcaa gctgaacccc agcctgcaga ccaccacct ctatttcat gtctctctag ccttggtgta catgtctgt ggggtgctgg tcatgctttt ggccattgtt gtcagcctgg gcatcaaat ccaactctac agtgccttt ttatgacttg cctactgctt atctttacc acgctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtcaagctta ccgtcagata caagagggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggcgtgtgtc attcctggtg gattgaccc ccatgttttg ctggaacatg aaactgacct cagagtacca cagaaatgtc acctccttt catgccaat ttgttccgtc atgagaatgg actacatggt atacttcagc ttctcaact ggattttcat cccctggtt gtcatgtcg ccatctatct tgacatcttt tacatcattc ggaacaaact cagtctgaac ttatctaact ccaagagac aggtgcattt tatggacggg agttcaagac ggctaagtcc ttgtttctgg ttctttctt gtttgctctg tcatggctgc ctttatctat catcaactgc atcatctact ttaatgggtga ggtaccacag cttgtgctgt acatgggcat cctgctgccc catgcaact ccatgatgaa cctatcgtc tatgcctata aataaaagaa gttcaaggaa acctacctt tgatcctcaa agcctgtgtg gtctgccatc cctctgattc ttggacaca agcattgaga agaattctga gtatttatcc atcagagatg actctgtctc attgacctc agattccca tcaacaaca cttgagggcc tgtatgctg ggccaaggga tttttacatc ctgattact tccactact tccctctcca cttcattttt ccttgtctc cccaattata tctctctctc tggagcctg acttggggac aacttattat tgatattatt ttctctctaa ttcagtggtt tggagcctg acttggggac gcctgaaggg tgcctagtgtg gtctgttttc ctctctcca atagaagaat aagtcattga tgggtgtgtg tcatteccat acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgtg tcatteccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gccattgtgg aattgagcag agaacctgct ctccgaggat gctagaaga tgttgggaac agaagaata aactgagttt aagggggact taaactgctg aattcacctg tggatgtttt tgagtaata aagctaata g MPNNSTALSL ANVTYITMEI FIGLCAIVGN VLVICVVKLN PSIQTTTFYF IVSLALADIA P VGLVMPLAI VVSLGITIH F YSCLFMTCLL LIFTHASIMS LLAIAVDRL RVKLTVRVYKR VTTHRIWLA LGLCWLVSFL VGLTPMFGWN MKLTSEYHRN VTFLSQCQFVS VMMDYMYVF SFLTWIFIP L VMCALYLDI FYIIRNKL SL NLSNKETGA FYGREFKTAK SLFLVLFLEA LSWLPLSIIN CIIFYNGEVP QLVLYMGILL SHANSMNP I VYAYKIKKFK ETYLLILKAC VVCHPSDSLD TSIEKNS E	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	atgaagcaca ttatcaact gtatgaaac atcaacaaca cagcaagaaa taattccgac A tgtctctgtg tggttttgccc ggaggagata tttttcaca tttccattgt tggagttttg gagaatctga tegtctgtgct ggctgtgttc aagataaga atctccaggc acccatgtac tttttcatct gtactgtgccc catabctgat atgtgggcca gactatataa gatcttgaa aatatcctga tcatattgag aaacatgggc tatctcaagc cactgtggag ttttgaacc acagccgatg acatcatcga ctccctgttt gtctctccc tgcttgctc catcttcagc ctgtctgtga ttgtcgccga ccgtacatc accatcttcc acgcactgcy gtaccacagc atgtgacca tgcgccgcac tgtgtgtgtg ctctcccat catgtgccc cagtgtacac cttcacgtcg actggcatca ccattgtgat ctccacctc ccagagacca acatgaaagg ggcatacaca ctgacctacc tgcctgggggt ctctcatctc tgcctggccc cctttgtgct tcatgtctc ttgatgacat tctgcccagg taacctctac tgcctgtgct acatgtctc cttccaggtg aacggcatgt tgatcatgtg caatgcctc attgacctc tcatatagc cttccggagc ccagagctca gggagcatt caaaaagatg atctctgca gcaggtaactg gtag MKHIINSYEN INNTARNNSD CPRVLP E E F F T T S I V G L E N L I V L L A V F K N K N L Q A P M Y P FFICSLAISD MLGSLYKILE NILIILRNMG YLXPRGSFET TADDIIDS L F VLSLLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTVV LTIVITFCTG TGITMVIFSH HVPVTITFTS LFFLMVFI L CLYVHMFLLA RSHTRKISTL PRANMKGAIT LTILLGVFI F CWAPFVLHVL LMTFCPSNPY CACYMSLEQV NGMLIMCNAV IDPFIYAFRS PELRDAFKKM IFCSRYW	Homo sapiens
32	309	Melanocortin NP_000520.1 2 Receptor (adrenocorti cotropic hormone) (MC2R)	tcctgccggc cgctcgttct gtgcccccg g cccggccacc gacggcccg cgttagatg A actttcccg atctcctgag cgtcagttc gagggaacct gcccggacag cagcgcagg ggctccagc cggcgccgg cggggcgagc gggcgccggc gggccccctc ggagggccg gcggtggcg gcgtgccgg gggcgccggc gggcgccggc gcgtggtggg cgcagcgagc ggcgaggaca accggagctc cggcgccggc cggcgccggc cggcgccggc cggcgagctg aatggcacgg cggccgtcgg gggactggtg gtgagcgcg agggcgtggg cgtggcgctc ttctggcag ccttcacct tatggccgtg gcaggtaacc tgcttgctac ccttcagtg gcctgcaac gccacctgca gaccgtacc aactattca tctgtaacct ggcctggcc gacctgctg tgaagccac cgtactgcc tctcggcca ccatggaggt tctgggctc tgggcctttg gccgcgctt ctgcagcta tggcgcccg tggagctgct gtgctgcag gcctccatcc tcagcctctg caccatctc gtggaccggt acgtggcggt gcgccactca	Homo sapiens
33	376	Alpha 1d- adrenoceptor		Homo sapiens

34	Alpha 1d- adrenoceptor	376	NP_000669.1	ctcaagtacc cagccatcat gaccgagcgc aaggcggcgc ccacccctggc cctgctctgg gtcgtagccc tgggtgtgtc cgtaggggcc ctgtggggct ggaaggagcc cgtgccccct gacgagcgct tctgcggtat caccgagagc ggggctacg ctgtcttctc ctccgtgtgc tccctctacc tgcctatggc ggtcatcgtg gtcattgact gcgcgtgtg cgtggtgcgc cgacgaccca cgcgcagcct cgaggcagcc gtcaagcgcg agcgaggcaa ggcctccgag gtggtgctgc gcatccactg tgcgggcgcg gccacgggcg cgcacggggc gcacggcatg cgacgaccca agggccacac ctccgcagc tgcctctccg tgcgcctgct caagtctcc cgtgagaaga aagcgcccaa gactctggcc atcgtctggg tbtctctcgt gctctgctgg ttccctttct tctttgtcct gccgtcggc tcttctgtcc cgcagctgaa gccatcgag ggcgtcttca aggtcatctt ctggctcgcc tacttcaaca gctgctgaa cccgtctcatc taccctgtt ccagcccgga gtccaagcgc gccctctccg gctcctcgc ctgccagtgc cgtcgtcgc ggcgcgcgc cctctctgg cgtgtctacg gccaccactg gcgggcctcc accagcgcc tgcgccagga ctgcgcccc agttcggcg acgcgcccc cggagcgcg ctggccctca cgcgctccc cgaaccgcac ccgaacccc caggcacgcc cgaagtgcag gtcccggtcg ccagccgtcg aaagccacc agcgcctcc cgcagtgag gctgctggg ccgttcgga gaccacgac ccagctcgc gccaaagtct ccagcctgc gcacaagatc cgcccgggg gcgcgcagc cgcagagga cgtgctgccc agcgtcaga ggtggagct gttccctag gcgtccaca cgcagtgccc gagggcgca cctgccagg ctacgaattg gcgaactaca gcaacctacg ggagccgat atttaaggac cccagagcta ggcgcggag tgtcgtggc ttgggggtaa gggggaccag agagggcgcg tgggttctta agagccccg tgcaaatcgg agaccggaa actgatcag cagctgctc tgtgacatcc ctgaggaact gggcagagct tgaggctgga gcccttgaag ggtgaaaagt agtggggccc cctgctggac tcagggtccc agaactctt tcttagaagg gagaggtgc gggctccgtg gggcctttg ctcccaatcc ctatttgaga aacactgccc cctcctccat gccctgaacc ctgagtagac agcccaagc atggccagga agcctgccc SGEDNRSSAG EPGSAGAGD VNGTAAVGGI VVSAQGVGVG VFIAAFILMA VAGNLLVILS VACNRHLQTV TNYFIVNLAV ADLLSATVL PFSATMEVLG FWAFFRAFCF VAAAVDVLCC TASILSLCTI SVDRYGVGRH SLKYPAINTE RKAAAILALL WVVALVSVG PLLGWKEPVP PDERFCGITE EAGYAVFSSV CSFYLPMAVI VMYCRVYV ARSTTRSLEA GVKRERKAS EVLRIHCRG AATGADGAHG MRSKAGHTFR SLSVRLLEKF SREKKAATL AIIVGVFVLC WPFEEFVLPL GSLFPQLKPS EGVFKVIFWL GFYNSCNPL IYPCSSREFK RAFRLRLRCQ CRRRRRRRPL WRVYGHWRRA STSGLRQDCA PSSGDAPPGA PLALTALPDP DPEPPGTPEM QAPVASRRKP PSAPREWRL GPFRPTQL RAKVSSLSHK IRAGGAQRAE AACQQRSEVE AVSLGVPHEV AEGATCQAYE LADYSNLRET DI agggcaggaga cgtgctgcgc gctgggtgc cggggggaga tgactcctgc caggagggcg A cctctgggaa gaagaccacg ggggaagcaa agtttcagg cagctgagga gccttcgccc cagccctcc gagcccaatc atccccagg ctatggaggc cgtactctaa gatgaatccc gacctggaca cgggccaca cacatcagca cctgccact ggggagagtt gaaaaatgcc aacttactg gccccaacca gacctagagc aactccacac tgcctcagct ggacatcacc agggccatct ctgtgggcct ggtgctgggc gccctcatcc tctttgccat cgtgggcaac	Homo sapiens
35	Alpha 1b- adrenoceptor	377	NM_000679	agggcaggaga cgtgctgcgc gctgggtgc cggggggaga tgactcctgc caggagggcg A cctctgggaa gaagaccacg ggggaagcaa agtttcagg cagctgagga gccttcgccc cagccctcc gagcccaatc atccccagg ctatggaggc cgtactctaa gatgaatccc gacctggaca cgggccaca cacatcagca cctgccact ggggagagtt gaaaaatgcc aacttactg gccccaacca gacctagagc aactccacac tgcctcagct ggacatcacc agggccatct ctgtgggcct ggtgctgggc gccctcatcc tctttgccat cgtgggcaac	Homo sapiens

36	Alpha 1b- adrenoceptor	NP_000670.1	<p>atcctagtca tctgtgtgtt ggccctgcaac cggcacctgc ggacgccac caactacttc  attgtcaacc tggccatggc cgacctgctg ttgagcttca cgcctctgcc cttctcagcg  gccctagagg tgcctggcta ctgggtgctg gggcgatctt tctgtgacat ctggcgagcc  gtgatgtcc tgtgctgcac agcgtccatt ctgagcctgt gcgccatctc catcgatcgc  tacatcgggg tgcgctactc tctgcagtat cccacgctgg tcacccggag gaaggccatc  ttggcgctgc tcaagtgtct ggtctgttcc accgtcatct ccatcgggcc tctccttggg  tggaaggagc cggcacccaa cgatgacaag gagtgcgggg tcaccgaaga acccttctat  gccctcttct cctctcttgg ctctcttctac atccctctgt cggtcattct agtcatgtac  tgcctgtct atatatgtgc caagaagacc acaagaacc tagaggcagg agtcatgaag  gagatgtcca actccaagga gctgacctg aggatccatt ccaagaactt tcacgaggac  acccttagca gtaccaagc caaggccac aaccacagga gttccatagc tgtcaaaactt  tttaagtctt ccagggaataa gaaagcagct aagacgttgg gcattgtggt cggtatgttc  atcttgtgtt ggctaccctt ctctcatgct ctaccgttg gctcctgtt ctccacctg  aagcccccg acgctgtgtt caagtgtgtt ttctggctgg gctacttcaa cagctgctc  aacccatca totaccatg ctccagaag gatttcaagc ggccttctgt gcgcatectc  gggtgccagt gccgcggcgc cggccgcgc cgaagccgc gccgcgctg cctgggcggc  tgcgctaca cctaccggcc gtggacgcgc ggcgctcgc tggagcgtc cagtcggcgc  aaggactcgc tggacgacag cggcagctgc ctgagcggca gccacgggac cctgcctcgc  gctcgcga gcccggtcta cctgggcgc ggcgcgcac cgcagtcga gctgtgcgc  ttccccagt ggaaggcgc cgggcctcgc ctgagcctgc cgcgcctga gcccccggc  cgccggcc gccacgactc gggccgctc ttacacttca agtccctgac cgagccgag  agccccgga cgcagcgccg gccacgaac ggagctgcg agccgcggc cgacgtggcc  aacgggcgc cggcttcaa aagcaacatg cccctggcgc cgggcagtt ttaggcccc  cgtgcgacg tttcttccc tgggagga aacatcgtgg ggggga</p>	Homo sapiens
37	Alpha 1c- adrenoceptor	NM_000680	<p>VLGAFILFAI P  TSSNSTLPOL DITRAISVGL  DLLLLSFTVLP FSAALEVLGY WVLGRIFCDI  LQYPTLVTRR KAILALLSVW VLSTVISIGP  SFYIPIAVIL VMYCRVYIVA KRTTKNLEAG  KGHNPRSSIA VKLFKFSREK KAAKTLGIVV  KVNFWLGYFN SCLNPIIYPC SSKEFKRAFV  QSRKDSLDDS GSCLSGSQRT  GALLSLPAPE PPGRGRHDS GPLFTFKLLT  SNMPLAPGQF  DVANGQPQFK  aatgctgaat cttccccag ccaggacgaa taagacagcg A  tgcatgttgc aaggagtctc ctgagatctc  ggtcccgggc taggccagcc cggcaggtgg  ggccatgtct ttaatgccct gcccttctat  cccaccccg cgcgcgctct  ccctccagcc gagacctttt gattccccgc  tggcagggct cccctccagc  tgacagccg gacctcgcc  gggaaatgct tccgacagct ccaactgcac</p>	Homo sapiens

38	Alpha 1c- adrenoceptor	NP_000671.1	<p> ccaaccgccc gaccgggtga acatttccaa ggcattcttg ctgggggtga tcttgggggg  cctcattctt ttccgggggtgc tgggtaacat cctagtgatc ctctccgtag cctgtcaaccg  acactgacac teagtcacgc actactacat cgtcaacctg gcgggtggccg acctcttgct  cactccacg gtgctgacct tctccggccat ctccgaggtc ctgagctact gggccttcgg  cagggtcttc tgcaacatct tgcacacatc ggcgggcagt ggatgtgctg tgcctgacccg cgtccatcat  gggectctgc atcatctcca tcgacccgcta cctggcgctg gctctgtctc tgcgtctggg cactctccct  aaccatcgtc acccagagga ggggtctcat ggtctgtctg gaggcagcgc gcccccaggg acgagaccat  ggtcatatcc attggacccc tgttcggctg ggtctgtctg gggcggcgg gcccccaggg ccttctacct  ctgcagatc aacgaggagc cgggctacct gctcttctca gcgctgggct ccttctacct  gcctctggcc atcatcctgg tcatgtactg ccggctctac gttgtggcca agaggagag  ccggggcctc aagtctggcc tcaagaccga caagtcggac tcggagcaag tgacgtccg  catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac  gcacttctca gtgaggctcc tcaagttctc ccgggagaag aaagcggcca aaagctggg  catcgtggtc ggctgcttgc tccctctctg gctgcctttt tctcttagtca tgcccattgg  gtcttctctc cctgatttca agccctctga aacagttttt aaaaatagtat tttggctcgg  atatctaaac agctgcata accccatcat ataccatgc tccagccaag agttcaaaaa  ggcctttcag aatgtcttga gaatccagtg tctccgaga aagcagctct ccaacatgc  cctgggctac acctgcacc gcccccacca ggcctgtgaa gggcaacaca agacatgggt  gcgcaccccc gtgggataca gagagacctt ctacaggata tccaagacgg atggcgtttg  tgaatggaaa ttttctctt ccatgcccg tggatctgac aggtattacag tgtccaaaga  ccaatcctcc tgtaccacag ccggtgtgag aagtaaaagc ttttggagg tctgctgctg  tgtaggcccc tcaaccccca gccttgacaa gaacatcaa gttccaaaca ttaagttcca  caccatctcc ctcagtgaga acggggagga agtctaggac agaaaagatg cagaggaaaag  gggaataatc ttaggtaccc accccacttc ctctcggaa gccagctctt tcttggagg  caagacagga ccaatcaag aggggacctg ctgggaatgg ggtgggtggt agaccacat  catcaggcag cgggtagggc acagggaaga gggagggtgt ctcaacaaca accagttcag  aatgatacgg aacagcattt ccctgcagct aatgctttct tggtaactt gtgccactt  caacgaaaac caccatggga aacagaattt catgcacaa ccaaaagact ataaatatag  gattatgatt tcatcatgaa tattttgagc acacactcta agttggagc tattcttga  tggaagtga gggattttat ttccaggctc aactactga cagccacatt tgacatttat  gccggaattc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681	<p> gcgctcgccg cccaccaggc ggacgccag gagaacctt gcctccgtcg cggtcctctg A  agagctgac gttcacctgc cccggcccg ctgaggacgg ggggtgccttc atgcggcccc </p>	Homo sapiens

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40	Alpha 2a- adrenoceptor	AAA51664.1	<p>gctcacaaaa ggttaaatgga tggggggttac ctagccctgg ctaattcccc ttccattccc  aactctctct ctctttttga agaaaaatgc taaggcagc cctgcctgcc ctcccatacc  cccgcgtgaa atatacacta tttttgatag cacacatggg gcccccatat ctcttgccct  tggttttgat gttgaaatcc tggccttggg agagatgcct tccaggcaga cacagctgct  tggttcaggc caagccctct tgcaatgcaa gccctttctg gtgttatgaa gtccctctat  gtcgtcgttt tcaccagcaa ctggtgactg tccctcgac acggacctgc tttgagattt  cctgacaggg aaaagatttc tgtccatttt ttctctgtgc ctaacagcat aattgccttt  tcctatgtaa atattatgat ggtggatcaa gatataagta aatgagcctt tctgcctcac  atcagccctg tgtataaagc cattattctc tgcatactg ttgccccag taactcactt  taaaacctct ctttccagtg ttccctctct ccctccaggg ceactgcttg aagaagaata  tgtatgtttc tatctcttat gtctgtgtgc ccctctgcc cgaagatgc tgactatggg  gaaatctttt agctgctgtt tttagactcc agggagtggg aattatgtg aagaagcaaa  cctgatacaa ttggcccaag gtaaacagtt tgaaaagaca aatgggcctg ccaaacgtga  cagtttcttc cccaagagct gttaggtatc aaaaattgtt ctttcccc ctccgtgctt  ttctggttga gatcatgtca ttgatgaact gccaaagtca ggggaggagg gcagagactt  tgtgtttaca tctgcatttc tacatgtttt agacagagac aatttaaggc ctgcactctt  atttcaacta agaaaaacta atgtcagcac atgtgtctaa tgacagtggg tttttttta  aataaaaaag tttaacagatc aaatgtgaaa taatatgaa tggagtggtc aaa</p> <p>MGSLQPDAGN ASWNGTEAPG GGARATPYSL QVTLTLVCLA GLMLLTVFG NVLVIIVFT P  SRALKAPQNL FLVSLASADI LVATLVIPIFS LANEVWGWIY FGKTWCEIYL ALDVLFCISS  IVHLCAISLD RWSITQAI E YNLKRTPRRI KAIITCWVI SAVISFPPLI SIEKKGSGGG  PQPAEPRCEI NDQWYVISS CIGSFFAPCL IMILVYRIY QIAKRRTRVP PSRRGPDAVA  APPGGTERRP NGLGPERSAG PGAAEAELP TQNGAPGEP APAGPRDTDA LDLEESSSD  HAERPPGPRR PERGPRGK ARASQVKPGD SLRGAGRGR GSGRRLOGRG RSASGLPRRR  AGAGQONLEK RETFVLAVI GVFWVCWEFF FFTYTLTAVG CSVPTLTFK FFWFGYCNSS  LNPVTYTFN HDFRRAFKKI LCRGDRKRIV</p>	Homo sapiens
41	Alpha 2b- adrenoceptor	NM_000682	<p>atggaccacc aggaccctca ctccgtgcag gccacagcgg ccatagcggc ggccatcacc A  ttctcattc tctttaccat ctctggcaac gctctggtca tctggctgt gttgaccagc  cgctcgctgc ggcacctca gaacctgttc ctggtgtcgc tggccgcgcg cgacatcctg  gtggccacgc tcatcatccc ttctcgtctg gccaacgagc tctgggcta ctggtacttc  cggcgacagt ggtgcgaggt gtacctggcg ctgcagctgc tctctgcac ctctccatc  gtgcaacctgt ggcctatcag cctggacgcg tactgggccc tgagccgcg cctggagtag  aactocaaag gaaccccgcg ccgcataaag tgcatactcc tcaatgtgtg gctcategcc  gccgtcatct cgctgcgcgc cctcatctac aaggcgacc agggccccc gccgcgcggg  cgccccagtg gcaagctcaa ccaggaggcc tgggtacatcc tggcctccag catcgatct  ttctttgctc cttgcctcat catgatcctt gtctacctgc geatctacct gatcgccaaa  cgacgcaacc gcagaggtcc caggggcctg ggggggctg gcaggggtga gtccaagcag  cccgaacccg accatggtgg ggcctttggcc tcagccaaac tggcagccct ggcctctgtg  gcttttgcca gagaggtcaa cggacactcg agtccactg gggagaagga ggagggggag  acccctgaag atactgggac ccgggccttg ccaccagt gggctgccct tcccaactca  ggccagggcc aagaaggaggg tgtttgtggg gcactctcag aggatgaagc tgaagaggag</p>	Homo sapiens



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 caatgctgat ggggctgtc attgaggacc cctgctctc ggtctcagt cccaccccaa  
 aacctggcac ccagaacagt tggaggtgt gaaaggaggt ttatcgccct tccctggag  
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 ggccagatgg acctgctaga ttgggaagg caccagggga gtttcttgg tgtagagaga  
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 gtgggttgtt gaggccag tatcgccctg gtagtgtgt gggagctgg ccaggagagg  
 gactgactgt gacctctgc tggccggtct tgggtggcc ccatgggacc cccagtgtc  
 ttgctgtga cctctattg cgacatgcag gtggtgttt tttttttt taaactctga  
 gctattttat caataaagga tatttgtaa taag

Homo

P

RSLRAPQNL

ALVILAVLTS

FLILFTIFGN

ATAAIAAIT

MDHQDPYSVQ

NP\_000673.1

Alpha 2b-

388

42

adrenoceptor		sapiens
43	Alpha 2c- adrenoceptor	<p>VATLIIPFSL ANELLGYWF RRTWCEVYLA LDVLFCTSSI VHLCALSLDR YMAVSRLEY  NSKRTPRRIK CIILTWWLIA AVISLPPLIY KGDOGQPRG RPOCKLNQEA WYILASSIGS  FFAPCLIMIL VYLRIYLIK RSNRRGPRAK GPGQGESKQ PRDHGGALA SAKLPALASV  ASAREVNGHS KSTGEKEEGE TPEDTGTRAL PPSWAALPNS GQOQKEGVCG ASPEDEAE  EEEEEEEC EQOAVPVSPA SACSPPLQOP QGSRVLATLR GQVLLGRGVG AIGGQWRRR  AHVTREKRF FVLAVVIGVF VLCWFPFFFS YSLGAICPKH CKVPGLFQF FEWIGYCNSS  LNPVIYTIEN QDFRAFRI LCRPWTQTAW</p>
389		<p>ctgcaggcgg cctcggaggg ggccgctctc ccgagcgcg cccccgcgc gccgccccgg A  actctcccc cggcccgcg gggcaggttc gaccaggcg cgcggggtc cggttccccg  ccagtcctcc agggcccgcg gcgccccgc cgcggcgcc cccccgtgc gctaaactga  ccaaagtgg aagccgatcg caggcgccg cactcgcc cagcagggc ggcggcgcg  ggcgggcg agctcccgcg agcagggcg cggccgacg gcaagcgtg accgcgggg  gcgccccgc cgggagcag cggaggactc ggcgggcg cggcgcccc cccgggaaag  taaaagtgg gacggaggga gcgcgcggg cgggccccga ggagcggcg cccggcccc  ggcgcgca gccctagcgg ccggatggga ggcggacgg cggggcccc gccgcttgt  cgctcgcg cgggtggc tcgggacgg cggggcgct cgggccccg acggcacgc cgctggccc  ggacccccgg aactgcccc ctccccgc cgtcgctcg agcggtcg ggcggagcg ggcggcgga  ctgctctga cttaacgct cggcagctgc gggagcgcg ggcggagcg cgtcgctc cggcgccgc  gcgccccg gagccaccac ggcggaggg cggctgctg ggcggcggt cctccggcg  cgccccgag cagcagggcg cgtcgggc ggcgacccg gctgggggg gcccgagctg  cgcggctgc gccccgctc caggagggg ggcgtagccc ggcggaggg catggctcc  cggcgctgg cggcgcgct ggcggtggg gacggcgcg gccccaatg gagcgcgcg  ggcgagagg gacggcgcg ggttgccaa cctcggggg cttcctggg gccgcgcg  ggcagtgact cggcgggcg ggtggcagg cttgctggc tgggggctt cctcatcgtc  ttcaacctgg tgggcaact gctggtggtg atcgccgtg tgaccagcg ggcgtcgc  gcgccacaga acctctcct ggtgtcgtg gcccgccg acatcctgt ggccacgctg  gtcatgccc tctggtgg caacagctc atggcctact ggtacttcg gcaggtgtg  tgcgcgctgt acctggcgt cgtgtgctg ttctgacct cgtcgatcgt gcatctgtgt  gccatcagcc tggaccgcta ctggtcggtg acgcaggcg tcgagtacaa cctgaagcg  acaccacgc gcgtcaagg caccatcgt gccgtgtgc tcatctcgc cgtcatctcc  ttcccgccg tggctcgt ctaccgccc cccgagcg cgcctacc gcagtggcg  ctcaacgac agacctggta cctcctgccc tctcctatg gctcctctt cgcgccccgc  ctcatcatgg ccctggtcta cgcgcgcatc taccagtg ccaagcgtc cagcgcaag  ctcagcgaga agcgcccc cgtgggccc ggcactgcg cccccgcc gccgactgg  ctggcgcg cggcaggcga ggcgagaac ggagggcg ggcggcgcg cggggccgtt cggcgggcg  agccggacga gagcgcga cgcggcgga ggagggcg ggcggcgcg cggggcggg  ggcgggcg gagcgggcg ggagggggg ggcggcggt cggacggga gggggcggg  cggggggcg ctagtcgg ggagctgacc gctccagg cccccggg cgggtggcg  ctctcgcg ccagctcgc ctccgtcag ttctctcgt cgcgcggcg cggggcgcg  agcagcgtg gccgccgaa ggtggcccag gcgcgcgaga agcgttccac cttgtgctg</p>
26		<p>ctgcaggcgg cctcggaggg ggccgctctc ccgagcgcg cccccgcgc gccgccccgg A  actctcccc cggcccgcg gggcaggttc gaccaggcg cgcggggtc cggttccccg  ccagtcctcc agggcccgcg gcgccccgc cgcggcgcc cccccgtgc gctaaactga  ccaaagtgg aagccgatcg caggcgccg cactcgcc cagcagggc ggcggcgcg  ggcgggcg agctcccgcg agcagggcg cggccgacg gcaagcgtg accgcgggg  gcgccccgc cgggagcag cggaggactc ggcgggcg cggcgcccc cccgggaaag  taaaagtgg gacggaggga gcgcgcggg cgggccccga ggagcggcg cccggcccc  ggcgcgca gccctagcgg ccggatggga ggcggacgg cggggcccc gccgcttgt  cgctcgcg cgggtggc tcgggacgg cggggcgct cgggccccg acggcacgc cgctggccc  ggacccccgg aactgcccc ctccccgc cgtcgctcg agcggtcg ggcggagcg ggcggcgga  ctgctctga cttaacgct cggcagctgc gggagcgcg ggcggagcg cgtcgctc cggcgccgc  gcgccccg gagccaccac ggcggaggg cggctgctg ggcggcggt cctccggcg  cgccccgag cagcagggcg cgtcgggc ggcgacccg gctgggggg gcccgagctg  cgcggctgc gccccgctc caggagggg ggcgtagccc ggcggaggg catggctcc  cggcgctgg cggcgcgct ggcggtggg gacggcgcg gccccaatg gagcgcgcg  ggcgagagg gacggcgcg ggttgccaa cctcggggg cttcctggg gccgcgcg  ggcagtgact cggcgggcg ggtggcagg cttgctggc tgggggctt cctcatcgtc  ttcaacctgg tgggcaact gctggtggtg atcgccgtg tgaccagcg ggcgtcgc  gcgccacaga acctctcct ggtgtcgtg gcccgccg acatcctgt ggccacgctg  gtcatgccc tctggtgg caacagctc atggcctact ggtacttcg gcaggtgtg  tgcgcgctgt acctggcgt cgtgtgctg ttctgacct cgtcgatcgt gcatctgtgt  gccatcagcc tggaccgcta ctggtcggtg acgcaggcg tcgagtacaa cctgaagcg  acaccacgc gcgtcaagg caccatcgt gccgtgtgc tcatctcgc cgtcatctcc  ttcccgccg tggctcgt ctaccgccc cccgagcg cgcctacc gcagtggcg  ctcaacgac agacctggta cctcctgccc tctcctatg gctcctctt cgcgccccgc  ctcatcatgg ccctggtcta cgcgcgcatc taccagtg ccaagcgtc cagcgcaag  ctcagcgaga agcgcccc cgtgggccc ggcactgcg cccccgcc gccgactgg  ctggcgcg cggcaggcga ggcgagaac ggagggcg ggcggcgcg cggggccgtt cggcgggcg  agccggacga gagcgcga cgcggcgga ggagggcg ggcggcgcg cggggcggg  ggcgggcg gagcgggcg ggagggggg ggcggcggt cggacggga gggggcggg  cggggggcg ctagtcgg ggagctgacc gctccagg cccccggg cgggtggcg  ctctcgcg ccagctcgc ctccgtcag ttctctcgt cgcgcggcg cggggcgcg  agcagcgtg gccgccgaa ggtggcccag gcgcgcgaga agcgttccac cttgtgctg</p>

44	389	Alpha 2c- adrenoceptor	NP_000674.1	MASPALAAL AVAAAAGPNA SGAGERSGG VANASGASWG PPRQYSAGA VAGLAADVGF P LIVFTVGNV LVVIAVLSR ALRAPQNLFL VSLASADILV ATLVMPPFSLA NELMAYWYFG QVWCGVYIAL DVLFTSSIV HLCAISLDRY WSVTQAVEYN LKRTPRRVKA TIVAVWLISA VISFPPLVSL YRQPDGAAYP QCGLNDETWY ILSSCISFF APCLIMGLVY ARIYRVAKRR TRTLSEKRAP VGPDGASPTT ENGLGAAAGE ARTGTARPR PTWSRTRAQ RPRGGAPGPL RRGRRRAGA EGGAGGADGQ GAGPGAQSG ALTASRSPG GRLSRASSR SVEFFLSRRR RARSSVCRK VAQAREKRET FVLAVVMGVF VLCWFPPFFI YSLYGICREA CQVPGPLFKF FFWIGYCNSS LNPVIYTFN QDFRPFKHI LFRRRRGFR Q	Homo sapiens
45	599	Bradykinin B1 Receptor	NM_000710	ctgtgcatgg catcatctcg gccctctc gagctccaat cctccaaaca gagccagctc A ttccctcaa atgctacggc ctgtgacaat gctccagaag cctgggacct gctgcacaga gtgtgcccga catttatcat ctccatctgt ttcttcggcc tcttagggaa ccttttctg ctgttggtct tctcctgccc cggcgggcaa ctgaacgtgg cagaaatcta cctggccaac ctggcagcct ctgacttggt gtttgtcttg ggttgccct tctgggcaga gaatatctg aaccagtta actggcctt cggagccctc ctctgccgtg tcatcaacgg ggtcatcaag gccaatttgt tcatcagcat ctctctggtg gtggccatca gccaggaccg ctaccgctg ctggtgcacc ctatggccag cggaaaggcag cagcggcggg gccaggcccg ggtcactgc gtgtcatct ggttgttggg gggectcttg agcatcccca cattcctgct gcgacctc caagccgtcc cagatctgaa catcacccgc tgcactcgc tcctcccca tgaggcctg cacttgcaa ggattgtgga gttaaatatt ctgggttcc tctaccact ggctgcgac gtcttctca actaccacat cctggcctcc ctgcgaacg gggaggaggt cagcaggaca agagtgcggg ggcggaagga tagcaagacc acagcgtga tctcagct cgtggtgccc ttcttggtct gctgggccc ttaccactc ttgacctcc ttgaaattct attccaggtg caagcagtc gaggtgctt ttgggaggac ttcatgacc tgggctgca attggccaac ttctttgct tcaactacag ctccctgaat ccagtaatt atgtcttgt gggcggctc ttcaggacca aggtctggga actttataa caatgcacc ctaaaagtct tgcctcaata tttcatccc ataggaaaga aatttccaa cttttctgac ggaattaaaa cagcattgaa cc	Homo sapiens

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPELEL QSSNQSLFPP QNATACDNAP EAWDLHRVL PTFIISICFF GLLGNLFVLL P VFLLPRQLN VAEIYLANLA ASDLVFVLGL PFWAENIWNQ FNPFFGALLC RVINGVIKAN LFISIFLVA ISQDRYRVLV HPMASGRQOR RRQARVTCVL IWVVGLLSI PTFLLRSIQ VPDLNITACI LLLPHEAWHF ARIVELNIG FLEFLFQVQA VRGCFWEDFI DLGLQLANFF RGPKDSKTTA LILTLVAVFL VCWAPYHFFA TPKSLAPISS SHRKEIFQLF WRN AFTNSSLNVP IYVFGRLFR TKWELVKQC	Homo sapiens
47	600	Bradykinin B2 Receptor	NM_000623	atgtttctctc cctgggaagt atcaatgttt ctgtctgttc gtgaggactc cgtgccacc A acggcctctt tccagcgcca catgctcaat gtcaccttg gctggctcaa cccatccag accttggcc agagcaaatg cccccaagt gctgctgtg gccacctag agaactctt tgcctcagc cccccttcc tctgggtgct gtctgtgtg gctgctgtg ccttctggg ccataccat cccaacaac gtcttctgcc tgcacaagag cagctgcacg gtggcagaga totacctgg gaacctggcc gcagcagacc tgatcctggc ctgcgggctg cgcctctgc cgcctgtga atgccattat cccatgaac ttcgactggc tctttggga gacgctctgc cctgctgtg gtgagcatcg accgtacct ggcctgggtg ctgtacagca gcatctgtt cctgatctg gatgcggcg gtgctgtgg ccaagctcta cagcttgggtg aaaaccatgt ccatgggccc cctgagctca cgtaccgct tgtgtcatca gctaccatc cctcatctgg atctgggggt gtacgtgtgt cctgaatgtc tggggttcc tgtgcccct gagtgtcatc tacagcgatg agggccacaa cgtaccgct cctgaatgtc tggggttcc tgtgcccct gagtgtcatc gaagtgttca ccaacatgtc cctgaatgtc cctgaatgtc tggggttcc tgtgcccct gagtgtcatc accttctgca cgtatcgatg cgtatcgatg cgtatcgatg tggggttcc tgtgcccct gagtgtcatc gagatccaga cggagaggag ggcacgggtg ctatgctctg tgtgctgtg gctattcatc atctgtgtgc tgccttcca gatcagcacc ttcctggata cgtgcatcg cctggcctc ctctccagct gccaggacga gcgcatac gcgcatac gatgtaata cacagatgc cctctcatg gcctacagca acagctgctt caaccactg gtgtacgtga tctgtggcaa gcgttccga aagaagtctt gggagggtga ccaggaggatg tgcagagaa ggggctgcag gtcagaaccc attcagatgg agaactccat gggcacactg cggacctcca tctcctgga acgccagatt cacaactgc aggactgggc agggagcaga gacagtgtt tttcagcatg ggcacaggaa tgcacaggag aatgtgtga aggattgagg gaaatgagtt gatgtctcc gtaaaacacc ggagactaat acatctatgc acgacctgg gaaatgagtt gactgtctcc gtaaaacacc ggagactaat tctgtccctg cccaattttg caggagcat gactgtgag atgggtgaa ctacgcaca gccaaggact ccaaatcac aacagcatta ctgttcttat ttgctgccac acctgagcca gctgtctct tccaggagt ggaggaggcc tggggggagg gagaggagt actgagcttc cctcccgtgt gtctccgtc cctgcccag caagacaact tagatctcca ggagactgc catccagctt tgggtgcaatg gctgagtga caagtgaatt gttgccccg gtttctttaa tctattcagc tagaactttg aaggacaatt tcttgcatata ataaagtta agcctgagg ggtccctgat aacaactgg agaccaggat tttatggct cctcactga tggacaagga ggtctgtgcc aaagaagaat ccaataagca catattgagc acttgctgta tatgcagtat tgagcactgt aggcaagacc caagaagag agggagccat cctcatcttg aaggactca aagactcaag tgggaacgac tgggcactgc caccaccaga agctgttctg acgagacggt cgagcagggt gctgtgggtg atatggacag cagaagggg agaccaaggt tccagctcaa ccaataacta ttgcacacc acctgtccct gctcagttc ccttttatgt aacatgaagt cgtgtgaggt gtaaaaggca gtaacaggta taaagtactt agaaagcaa aggtgtgtac	Homo sapiens

48	600	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcatacatta cgcagacgta actgggatat gttactata aggaaaagac  actgaggtct agaaatagct ccgtggagca gaatcagtat tgggagccgg tggcggtgtg  aagcaccagt gtctggcaca cagtaggtgc tcatggctc ccttccacct gtcattocca  ccacctgag gccccaaccg ccacacacac agagcattt ggagagaagg ccatgtcttc  aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcggtcttgc ccagaggatc  acagtgtcta gacccccac caccagccgg tacctgggaa gggggagagt gcaggcctgc  tcagggactg ttctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggtttattg  gaagtgcc cagtatgagc cctataagag tgtgaaaagg atggcaatg gtgttcacca  tcggcagtgc cagggcagca atcattcaat tgataatga atatttatta gctggttgga  gagctagaac ctggagagct agaactgga gaactagaac ctggagggtc agaactgga  gaggctagaa ccaagaaggg ctagaacctg gagggctag aacctagaga agctaaaacc  tgagctagaa gctggaggac tagaacctgg agggctgga tctgaagggc tagaacctgg  agggctgga tctggagagc tagaacctgg agggctgga cctggagggc tagaacctag  aaggctaga acctggaggg ctggaatctg gagagctaga acctggaggg ctagaacctg  gagggctaga acctagaagg gctagaacct ggagggttag aacctggcag gttagaacct  agaagggcta gaacctggag agccagaacc tggagggcta gaacctgga gggctagaac  ctgtagagct agaactgga gagctagaac cggcagggt agaactggc aagctagaac  ctggagggaa tgaacctgga gggctagaac ctggagaatg agaaaaattt acatggcaaa  gagccataa atcttgacca atccactct gaattttaa gcaaaagcgt gaaaaaaag  attccctct taccccaac ccactcttt tcccaccac ccactctct ctgcctcagt  aagtatctgg aggaagaaaa cagtgaaag aagaagtaa aacctttag tattagtatt  agaatgaagt caaactgtgc cacacatggt gaatgaaaa aaaaaaaag aggcgtgtgtt  ttgtcacaca gggcagtcac tcagcacag agcagtgat ggtctgagac tctcttagga  gcagagctct ccgcgaatgg ccattgtggg atccacacct ggtctgagg gcaactgagt  ctgcgggaga agagcggccc tatgcatggt tagatgccc tgataaagaa catctgtcct  gtgaaagact caatgagctg ttatgttcta aacaggaagc atttcacatc caaacgagaa  aatcatgtaa acatgtgtct tttctgtaga gcataataa tggatgaggt tttgcaaaa  aaaaaaaaa aaa</p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p>PFPLWVLFVL ATLENIFVLS VFCLHKSSCT VAEIVLGNIA AADLIACGL PFWAITISNN  FDWLFGETLC RVVNAIISMN LYSSICFLML VSIDRYLALV KTMSGMRG VRWAKLYSLV  IWGCTILLSS PMLVFRMKE YSDEGHNVT A CVISYPSLIW EVFTNMLNV VGFLPLSLVI  TFCTMQIMQV LRNMEMQKFK EIOTERRATV LVLVLLLF I CWLPFQIST FLDTLHRLGI  LSSQDERII DVITQIASFM AYSNSCLNPL VYIVGKRFR KKSWEVYQGV CQKGGCRSEP  IQMENSMTL RTSISVERQI HKLQDWAGSR Q</p> <p>tgctaccgc gccgggctt ctgggggtgt ccccaaccac ggcccagccc tgccacacc A  ccccccccc gcccccgcag ctccgcatgg gcgcgggggt gctcgtcctg ggcgcctcgg  agcccggtaa cctgtcgtcg gccgcacgcg tcccgcagg gcgcggccacc gcggcgccgc  tgctggtgcc cgcgtcgccg cccgcctcgt tgctcctcc cccagcgaa agccccgagc  cgctgtctca gcagtggaac gcgggcagtg gtctgtgat ggcgtcatc gtgctgtca  tcgtggcggg caatgtgctg gtgctcgtgg ccacgcca gacgcgcgg ctgcagacgc</p>	Homo sapiens

50	Beta-1 adrenoceptor	NP_000675.1	<p> taccacacct cttcatcatg tccctggcca ggcgcgacct ggtcatgggg ctgctggtgg  tgccgttcgg ggcaccatc gtggtgtggg gccgtgtgga gtacggctcc ttcttctgcg  agctgtggac ctacgtggac gtgctgtgcy tgacggccag catcgagacc ctgtgtgtca  ttgccctgga ccgtctacct gccataacct cgccttcccg ctaccagagc ctgctgacgc  gcgcgcgggc ggcggggcctc gtgtgcaccg tgtgggacct ctgcggcctg gtgtccttcc  tgcccatcct catgcaactg tggcggggcg agagcgacga ggcgcgcgcg tgctacaacg  acccaagtg ctgcgacttc gtcaccaacc gggcctacgc catcgctcgc tccgtagtct  ccttctacgt gccctgtgct atcatggcct tegtgtacct gcgggtgttc cgcgaggccc  agaagcaggt gaagaagatc gacagctggc agcgcccttt cctcggcggc cagcgcgggc  cgccctcgcc ctgcgctcgc cccgtccccg cgcgcgcgcg gccgccccga cccccgcgc  cgcgcgccgc cgccgccacc gcccgctgg ccaacggggc tgccgggtaag cggcgccctc  cgcgctcgt ggcctacgc gacgagaag cgctcaagac gctggggcat atcatggcg  tcttcacgct ctgctggctg ccttcttcc tggcaacgt ggtgaaggc ttccacgcg  agctggtgcc cgaccgctc ttgcttctc tcaactggt gggctacgc aactcgccct  tcaaccccat catctactgc cgcagccccg acttcgcaa ggccttccag ggaactgctc  gctgcgcgcg cagggtgccc cgccggcgcc acgggaccca cggagacgcg ccgcgcgctc  cgggtgtct ggcgcggccc ggacccccg catcgccccg ggcgcctcg gacgacgacg  acgacgatgt cgtcggggc acgcgcgcgc cgcgctgct gtagccctgg gccggctgca  acggcggggc ggcgggggac agcgactcga gcttgagca ggcgtgcgc cccgcttcg  cctcggaatc caaggtgtag ggcgcgcgc ggcgcgcgcg ctcggggcac ggttccacg  gggaacgagg agatctgtgt ttacttaaga ccatagcag gtgaactcga agccacaat  cctcgtctga atcatccgag gcaagagaa aagcacgga cgttgcaaaa aaaggaaag  ttgggaagg gatgggagag tggctgctg atgttcttg ttg </p>	Homo sapiens
51	Beta-2 adrenoceptor	NM_000024	<p> MGLMALIVL LIVAGNVIVI VAIKTRPRLQ TLNLFIMSL ASADLMGLL VVFGATIV  WGRWEYGSFF CELMTSDVIL CVTASIEIIC VIALDRYLAI TSPFRYQSL TRARAGLVC  TVWALISALVS FLPILMHWR AESDEARRCY NDPKCCDFVT NRAYAIASSV VSFYVPLCIM  AFVYLRVFRE AQKQVKIDS CERRFLGGA RPPSPSPSPV PAPAPPPGP RPAAAAATAP  LANGRAGKRR PSRLVALREQ KALKTGLIIM GVFTLCWLPF FLANVVKAFH RELVPDRLFV  FFNWLGYANS AFNPIIYCRS PDKFAFQGL LCCARRARR RHATHGDRPR ASGLARPGP  PSPGAASDD DDDVVGATP PARLLEPWAG CNGGAADSD SSLDEPCRP FASESKV  actgcgaagc ggcttcttca gagcacgggc tggactggc aggcacgcg agcccttagc A  accgcgaag ctgagtgtgc aggcagatc cccaccacac ccacaccaca gccgtgaat  gaggttcca ggcgtcctg cgcggccgc agagccccgc cgtgggtccg cccgtgagg  cgccccagc cagtgcgctt acctgcaga ctgcgcgcca tggggcaacc cgggaacggc  agcgcttct tgcctggcacc caatagaagc catcgccgcg accacgacgt caccagcaaa  agggacgagg tgtgggtggt gggcatgggc atcgtcatgt ctctcatcgt cctggccatc  gtgtttggca atgtgctggt catcacagcc attgccaagt tcgagcgtct gcagacggtc  accaactact tcatcacttc actgctctgt gctgacttgg tcatgggctt ggcagtgggtg  ccctttgggg ccgccccat tcttatgaaa atgtggactt ttggcaact ctggtgcgag  ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagaccct gtgcgtgatac </p>	Homo sapiens

52	640	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctactttgc cattacttca cctttcaagt accagagcct gctgaccaag  aataaggccc gggatgatcat tctgatgtg tggattgtgt caggccttac ctccttcttg  ccattcaga tgcactggta ccgggccacc caccagaag ccatcaactg ctatgccaat  gagacctgct gtgacttctt cactggtgat catggtcttc gtctactcca ggtctcttca ggaggccaaa  ttctaegtcc cctggtgat caaactctgag ggcgcttcc atgtccagaa ccttagccag  aggagctcc agaagattga ccaatctgag gggcagat ctccagat ctccaagt ctgcttgaag  gtggacagg atgggaggac ggttaggcac gttaggcca cttcaccct ctgctggctg  gagcacaaag cctcaagac gttagcgcac atccaggata acctaccct taaggaaagt  cccttcttca tegttaacat tgtgcatgtg atccaggata acctaccct tatctactgc  tacctctcc taaattggat aggtatgtc aattctgtt tcaatcccc tatctactgc  cggagccag attcaggat tgccttcag gagcttctgt gctgagcag gtcttcttgg  aaggctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatcac  gtggaacagg agaaagaaaa taaactgctg tgtgaagacc tccaggcac ggaagacttt  gtgggccatc aaggtactgt gcctagcgcac aacattgatt cacaaggag gaattgtagt  acaaatgact cactgctgta aagcagtttt tctacttcta aagaccccc ccccccaac  agaacactaa acagactatt taacttgagg gtaataaaact tagaataaaa ttgtaaaaat  tgtatagaga tatgcagaag gaaggcact ctctgcctt ttttatttt ttaagctgta  aaaagagaga aaacttattt gactgattat ttgtattttg tacagttcag ttcctcttgg  catggaattt gtaagtttat gtctaaagac ctttagtctt agaggaccc agtctgctat  atttctatga cttttccatg tatctacctc actatccaag tattaggggg aatatattgc  tgcgggtaat ttgtatctga aggagatttt ccttcttaca ccttggact tgaggatttt  gagtatctcg gacttttcag ctgtgaacat ggactcttcc cccactctc ttatttgctc  acacggggta ttttaggcag gatttgagg agcagcttca gttgttttc cgagcaagg  tctaaagttt acagtaataa aatgtttga ccatg</p>	Homo sapiens
53	643	Beta-3 adrenoceptor	NM_000025	<p>FERLQTVTNY FITSLACADL VGLAVVPFG AAHIMKMT FGNFWCEFWT SIDVLCVTAS  IETLCVIADV RYFAITSPFK YQSLLTKNKA RVILMVIV SGLTSFLPIQ MHWYRATHQE  AINCYNETC CDEFTNQAYA IASSIVSYV PLVIMVFVYS RVFQEAQRQL QKIDKSEGRF  HVQNLSQVEQ DGRTHGLRR SSKFCLKEHK ALKTLGIIMG TFTLCWLPFF IWNIVHVIQD  NLIRKEVYIL LNWIGYVNSG ENPLIYCRSP DFRIAFQELL CLRRSSLKAY GNGYSSNGNT  GEQSGYHVEQ EKENKLLCED LPTGTEDFVGH QGTVPDNDID SQGRNCSTND SLL  gctactctc ccccaagagc ggtggcaccg agggagtgg ggtgggggga ggtgagcgc A  tctggctggg acagctagag aagatggccc aggtgggga agtgccttc atgcctgtt  gtccctccc ctgagccagg tgatttgga gacccctcc ttccttctt cctacccgc  ccacgcgga cccgggatg gctcctggc ctccagaga cagctctctt gcccatggc  cggacctccc caccctggc cccaataccg ccaacaccag tgggctgcca ggggttccgt  ggagggcggc cctagccggg gccctgctgg cgtggcggt gctggccacc tggggaggca  acctgctggt catcgtggc atgcctgga ctccagact ccagaccatg accaactgtt  tctgacttc gctggccgca gccgacctgg tgatgggact cctggtgtg ccgcccggcg  ccaccttggc gctgactggc cactggcgt tgggcccac tggctgcag ctgtgacct  cgggtggact gctgtgtgtg accgccagca tggaaacct gtgcgccctg gccgtggacc</p>	Homo sapiens

Homo sapiens

MAPWPHESS LAPWPDLP L APNTANTSG L PGVPWEAALA GALLALAVLA TVGGNLLIV P

Beta-3  
adrenoceptor

643

54





58	692	Bombesin Receptor Subtype-3	NP_001718.1	MAQRPHSPN QTLISITNDT GILGNAILIK VFFKTKSMQT KVLISFIRLTS VGVSVFTLTI PEALFSNVYT FRDPNKNMTF ARTLYKSTLN IPTEEQSHAR YVDPSTAMHFI FTIFSRVLAF SLTTLAVMGT VPGTSGSIQMS	ESSSSVVSND NTKNGWSDN VPNIFITSLA FGDLLLLLTC LSADRYKAVV KPLERQPSNA ESCTSYSPVSK KLLQEIHSLL KQIESRKRIA RTVLIVIVALF SNSCVNPFFAL YWLSKSFQKH EISVTSFTGC SVKQAEDRF	SPGIEALCAI YITYAVIISV P VPVDATHYLA EGWLFGRIGC ILKTCVKAGC VWIVSMIFAL CFLVFIYIPL SIIISVYSLI ALCWLPNHLI YLYHSFTSQT FKAQLFCCKA ERPEPPVADT	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	gctggccacct ctctagaggc tggtagactca cagcgggac aacctggagg acctgttctg gtggaataac atctctgccc ttcgtgcccg tggcctacag ctggtagacc tggagcggca ctggccctgg cagacctcct gtgggctggg tccctgggac ttctactgca gcagcctgct cacgcgctcc atgcctaccg atctggctgg tgggcttctc ggccatcaca acaactccct catgcctggt tcacctcccg gtgatgggct ggtgctactg cagcggcaga aggcagtcag tcacctacc acatgctcat acctgcaagc tgaatggctc gccactgct gcctcaaccc ctgtcggggc tcctgacgaa cctagctggc gcaggagcag taggtcccaag tgtccctttt ctccttccaa caggagctgg atcctcattt ggggtagcta ttctgcccgc cctggggcta tgaaggctgt ccttaccat	acctggcggg acctggcggg agccatgaac taacctgtaa ggaactggac agatgggaca tgccacagag gggccctctc cctcatcttc ctctgggagc cggcagaca cgcagttcca gtggctcttc atcttgccct cttctcttgc aaaactgtga ctcgccctgc atgcgcctgg ccacgcgcgc ctctcttcca ccttgccctg ccagagattc gcaagttgc accttctccc attctcttac catgtggcgg gggggtagtg cacaggttgc ggtggccatc ctggtgacaa cttctgggac acctgggaga tgtccccgtg gccatcaca catgtcttac actttcgccg gctggaagtt cgcagtgac acctccctgt cctccctgtg ccactctctt caccacttct gtcagcagtg gcaggcagtg ttctctggg gctcaccctg gctaagagtg tcttaggagt gctaagagtg tagaacatcc cagggagcgg aaagcagctc cagggcagtg agaacctcac ctgggctgag gaacctccca	gtgaccagtc A ggacctcgag cacctccctg caagccctgt cgtctctggt cggagacctt ctggttccac tgccgtggc tgccctgtga accgtacct tccacatcac tcttcgcaa agagacca gattctgct gccatgctg gccaggcca gcatctctt cctctgctg ggctgaaggc tgtgtgagtt cctgggctg gcgtgaagtt cgcagtgac cctccctgtg ccactctctt caccacttct gcaggcagtg gtcaggagtg tcttaggagt tagaacatcc cagggagcgg aaagcagctc gaacctcac gaacctccca	Homo sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> MNPPLTLEMD LENLEDLEWE LDRLDNYNDT SILVENHLCPA TEGPLMASFK AVFVPVAYS L P  IFLLGVIGNV IVLVILERHR QTRSSTETFL FHLAVADLLL VFILPFAVAE GSVGWVLGTF  LCKTVIALHK VNFYCSSL L ACIAVDRYLA IVHAVHAYRH RRLLSIHITC GTIWLVGFL  ALPEILFAKV SQGHNNSLP RCTFSQENQA ETHAWFTSRF LYHVAGFLLP MLVMGWCYVG  VVHRLRQQR RPQRQKAVRV AILVTSIFFL CWSPYHIVIF IDTLARLKAV DNTCKINGSL  PVAITMCEFL GLAHCCCLNPM LYTFAGVKFR SDLSRLLT KL GCTGPASLCQ LFPSWRRSSL  SESENATSLT TF  ggcacgagcc cagaaacaaa gacttcacgg acaaaagtccc ttggaaccag agagaagccg A  ggatggaaac tccaaacacc acagaggact atgacacgac cacagagttt gactatgggg  atgcaactcc gtgccagag gtgaacgaga gggcctttgg ggcacaaactg ctgccccctc  tgtactcctt ggtatttgtc attgccctgg ttggaacat cctggtgtgc ctggtccttg  tgcaatacaa gaggctaaaa aacatgacca gcatctacct cctgaacctg gccattctg  acctgctctt cctgttcacg ctccctctct aagatccctct ctgggtttta ttacacaggc ttgtacagc  tttttggga tgccatgtgt aagatccctct ctgggtttta ttacacaggc ttgtacagc  agatcttttt catcatcctg ctgacgattg acaggtaacct ggccatcgtc cacgccgtgt  ttgaccttgc ggcaaggacc gtcaactttg gtgtcatcac cagcatcatc atttgggcc  tggccatctt ggcttccatg ccagctttat acttttccaa gacccaatgg gaattcactc  accacacctg cagccttcac ttctctcac aaagcctac agagtggag ctgtttcagg </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> ggcacgagcc cagaaacaaa gacttcacgg acaaaagtccc ttggaaccag agagaagccg A  ggatggaaac tccaaacacc acagaggact atgacacgac cacagagttt gactatgggg  atgcaactcc gtgccagag gtgaacgaga gggcctttgg ggcacaaactg ctgccccctc  tgtactcctt ggtatttgtc attgccctgg ttggaacat cctggtgtgc ctggtccttg  tgcaatacaa gaggctaaaa aacatgacca gcatctacct cctgaacctg gccattctg  acctgctctt cctgttcacg ctccctctct aagatccctct ctgggtttta ttacacaggc ttgtacagc  tttttggga tgccatgtgt aagatccctct ctgggtttta ttacacaggc ttgtacagc  agatcttttt catcatcctg ctgacgattg acaggtaacct ggccatcgtc cacgccgtgt  ttgaccttgc ggcaaggacc gtcaactttg gtgtcatcac cagcatcatc atttgggcc  tggccatctt ggcttccatg ccagctttat acttttccaa gacccaatgg gaattcactc  accacacctg cagccttcac ttctctcac aaagcctac agagtggag ctgtttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	ctctgaaact gaacctcttt gggctggtat tgcctttgtt ggtcatgac atctgtaca caggattat aaagattctg ctaagacgac caaatgagaa gaaatccaa gctgtccgtt tgatttttgt catcatgac atcttttttc tcttttgac cccctacaa ttgactatac ttatttttgt ttccaagac ttccgtttca ccatgagtg cctacacgca ctgctgtgc aaccagtga acctgctgt gcaagtgaag gagtgatcg aggttcgga agtacctcg gactgttc cacaggcgtg tctacgctt cgttggtgag aggttcgga aggttcgga agtacctcg gactgttc cacaggcgtg tgctgtgca cctggttaa tggtccctc tctctccgt gacacgctg gagagggtca gctcacatc tccctccaca gggagcagtg aactcttcg tgggtttcga ctcagaccat aggaggccaa cccaaaataa gcaggcgtga cctgccagg acactgagc agcagcctg ctctccagc caggttctga ctctggcac agcatggagt aggtctctg ggttcagtc tttccatga agggaatga atggtggcct ggggtctctg aggtctctg aggtctctg ggttcagtc tttccatga actctcccc tggtagaag agatgaatg agcaaacca aatattccag agactggac taagtacc agagaaggc ttggactcaa gcaagatttc agatttgga ccattagcat ttgtcaacaa agtcacccac ttccactat tcttgaca aaccaattaa accagttagt ggtgactgt ggtccattc aaagtgact cctaagccat gggagacact gatgtatgag gaattctgt tcttccatca cctcccccc cccgccacc tccactgcc aagaacttgg aaatagtat ttccacagt actccactc ggtccacga gcaatcagt agccagcatc tgctccccct tccatccac cgcaggattt ggtctcttg aatcctggg aacatagaac tcatgacgga agagttgaga cctaacgaga aatagaatg ggggaactac tgcctgacgt ggaactaaga agcccttag gaagaattt tatatccact aaatcaaac aattcaggga gtgggctaag cagggcccat atgaataca tgggtgtctt cttaaaatag ccataaaggg gaggactca tcaattccat ttaccctct tcttgacta ttttcagaa tctctctct ttcaagttg ggtgatagt tggtagattc taatggctt attgcagcga ttaataacag gcaaaaggaa gcagggttg ttccctctc ccatcttga cttgcagca aaaaaaaa aaaaa atgggtcaga gttccgactg ccatcttga atpckvner afgaqlppl yslfviglv gnllvlllv P METPNTTEDI DTTTEFDYGD ATPCQKNER ALRARTVTFG VTSIIIAL AILASMPGLY FSQTQWETH QYKRLKNMTS IYLLNLAISD LLFLTLFW IDYKLDWMV FGDAMCKILS GFYTGLYSE IFFILLTID RYLAIVHAVF ALRARTVTFG VTSIIIAL AILASMPGLY FSQTQWETH HTCSLHPHE SLREWKLFQA LKLNFGVL PLVMIICYT GIKILLRRP NEKSKAVRL IFVIMIIFFL FWTPYNLTIL ISVFQDFLFT HECEQSRHLD LAVQVTEVIA YTHCCVNPVI YAFVGERFRK YLRQLFHRV AVHLVWLFP LSVDRLEVS STSPSTGEHE LSAGF ttttctctc tctatcacag ggagaagtga aatgacaac tcaatagata cagttgagac A ctttggtacc acatccact atgatgactg gggcctgctc tgtgaaaaag ctgataccag agcactgat gccagtttg tgcctccgt gtaactcctg gtgttccact tggcctctt gggcaatgt gtggtggtga tgatcctcat aaaaacag aggtccgaa ttatgacaa catctacctg ctcaacctg ccatctcga cctgctctc ctcgtcacc ttccattctg gatccactat gtcaggggc ataactgggt tttggccat ggcattgta agctcctc agggtttat cacacaggt tgcacagcga gatcttttc ataactcgc tgacaatcga caggtacctg gccattgtcc atgtgtgtt tgccttcga gcccgactg tcaatttgg tgtcatcacc agcatcgtca cctggggcct ggcagtgcta gcagctctc ctgaattat cttctatgag actgaagagt tgtttgaaga gactcttgc agtctctt accagagga	Homo sapiens
63	737	C-C Chemokine Receptor 3	NM_001837	ttttctctc tctatcacag ggagaagtga aatgacaac tcaatagata cagttgagac A ctttggtacc acatccact atgatgactg gggcctgctc tgtgaaaaag ctgataccag agcactgat gccagtttg tgcctccgt gtaactcctg gtgttccact tggcctctt gggcaatgt gtggtggtga tgatcctcat aaaaacag aggtccgaa ttatgacaa catctacctg ctcaacctg ccatctcga cctgctctc ctcgtcacc ttccattctg gatccactat gtcaggggc ataactgggt tttggccat ggcattgta agctcctc agggtttat cacacaggt tgcacagcga gatcttttc ataactcgc tgacaatcga caggtacctg gccattgtcc atgtgtgtt tgccttcga gcccgactg tcaatttgg tgtcatcacc agcatcgtca cctggggcct ggcagtgcta gcagctctc ctgaattat cttctatgag actgaagagt tgtttgaaga gactcttgc agtctctt accagagga	Homo sapiens

64	737	C-C Chemokine Receptor 3	NP_001828.1	<p>           tacagtatat agctggaggc atttccacac tctgagaatg accatcttct gtctcgttct            ccctctgctc gttatggcca tctgctacac aggaatcatc aaacgctgc tgaggtgccc            cagtaaaaa aagtacaagg ccatccggct cattttgtc atcatggcgg tgtttttcat            tttctggaca cctacaatg tggctatcct tctctctcc tatcaatcca tcttatttgg            aaatgactgt gagcgagca agcatctgga cctgtccatg ctggtgacag aggtgatcgc            ctactccac tgctgcatga acccggtgat ctacgcttt gtggagaga ggttccggaa            gtacctgcgc cacttcttc acaggeactt gctcatgca. ctgggcagat acatccatt            cttctcagt gagaagctgg aaagaaccag ctctgtctct ccatccacag cagagccgga            actctctatt gtgttttagg tcagatgcag aaaattgcct aaagaggaa gaccaagag            atgaagcaaa cacattaagc cttccacact cacctctaaa acagtcttc aaacttccag            t         </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p>           ttttsldtvct fgttsyyddv gllcekadtr almqafvpl yslvftvll gnvvvmlil p            kyrrlrmtin iyllnlaisd llflvtlpfw ihyyvrghnw fghgmcklls gfyhtglyse            ifftilltid rylaivhavf alrartvtfg vitsivtwgl avlaalpefi fyeteelfee            tlcsalyped tvyswrhft lrmtifclvl pllvmaicyt gliktllrcp skkykairl            ifvmafffi fwtpynvail lssyqsilfg ndcerskhlndcslvtevia yshccmnpvi            yafvgerferk ylrhffhrhl lmhlgrvlpf lpseklerts svspstaep lsiiv            cgggggtttt gatctcttc cctctctctt cctctctctt cctctctt cctctctt cctctctt            tctctctt cctctctt cctctctt cctctctt cctctctt cctctctt cctctctt            agaaaagcaa gctgctctg gttgggccc gactgcctt gagagcctg tagagttaaa            aaatgaacc cagcgatata gcagatacca cctcgatga aagcatatac agcaattact            atctgtatga aagtatcccc aagccttga ccaagaagg catcaaggca tttggggagc            tcttctctg cctgttcaaa tacaagcggc tctctctgt tttctctt cctctctt cctctctt            tgggtctgt cctgttcaaa tacaagcggc tctctctgt tttctctt cctctctt cctctctt            acctgccc ctggtatctg ctctctctg gcaagatgat ttcctggatg tactgtgtg            cagaccagt ggttttttggg ttgtctatg tcatgagcat tgatagatag ctggcgatag            gcttttacag tggcatatc ttgtctatg tcatgagcat tgatagatag ctggcgatag            tgcacgcgt gtttctctg agggcaagg ccttgacta tggggtcat accagtgtg            ctacatggc agtggctgtg ttcgctccc ttcctggctt tctgttcagc actgttata            ctgagcgcaa ccatacctac tgcaaaacca agtactctct caactccacg acgtggaag            ttctcagct cctggaaatc aacattctcg gattggtgat ccccttaggg atcatgtgt            ttgtctact catgatcatc aggaacttgc agcatgtga aaatgagag aagaacaagg            cggagaagat gatcttggc ggtgtgttc tctctctg gttctggaca ccttacaaca            tagtgcctt cctagagacc ctggtggagc tagaagtcct tcaggactgc accttgaaa            gatacttga ctatgcatc caggccacag aaactctggc tttgttcac tgcgtctta            atcccatcat ctactttttt ctgggggaga aatttcgcaa gtacatccta cagcttca            aaacctcag gggcctttt gtgtctgccc aatactggt gctcctcaa atttactctg            ctgacacccc cagctcatct tacacgcagt ccacctgga tcatgatctt catgatgctc            tgtaggaaaa atgaaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta            ctttaaaatt ggtattttta ggtaagagat ccttgagcca gtgtcaggag gaaggttac            accacagtg gaaagacagc ttctcatcct gcaggcagct ttttctctcc cactagacaa         </p>	Homo sapiens

66	738	C-C Chemokine Receptor 4	NP_005499.1	gtccagcctg gcaagggttc acctgggctg aggcatacctt cctcacacca ggcttgctg caggcatgag tcagctctgat gagaactctg agcagtgctt gaatgaagtt gtaggtaata ttgcaaggca agactattc ccttctaacc tgaactgatg ggtttctcca gaggaattg cagagtaactg agtgatggag taaactgcta ccttttgctg tggcaaatgg gcccccg VLVLFKYKRL RSMTDVYLIN LAISDLLFVF SLPFWGYAA QDWVFLGLC KMISWYLVG FYSGIFFVML MSIDRYLAIV HAVFSLRART LTYGVITSLA TWSVAVFASL PGFLFSTCYT ERNHTYCKTK YSLNSTTWKV LSSLEINILG LVIPLGIMLF CYSMIIRTQ HKNEKNKA VMMIFAVVL FLGFWTPYNI VLFLETIVEL EVLQDCTFER YLDYAIQATE TLAFVHCCLN PIIYFFLGEK FRKYILQLEK TCRGLFVLCQ YCGLLQIYSA DTPSSSYTQS TMDHDLHDAL gtgagacagg ggtagtgcga ggcggggcac agccttctctg tgtggtttta cgcgccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgctcatt ttccaggat gctgtgtgca agatgaggtc acgagcatt acatcgaga caacaccaca gtggactaca cttgttgcga gtctttgigc tccaagaagg acgtgcggaa ctttaaaagcc tggttcctcc ctatcatgta ctccatcatt tgtttcgtgg gcctactggg caatgggctg gtcgtgttga cctatatcta ttccaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc tgacacctc ccttctgggc ctacagcgcg gccaagtcct ggtctctcgg tgtccacttt tgcacagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctaactctt tgcacagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca cgcgccctg gcccgcgtcc ttctcatcag caaagctgtcc tgtgtgggca tctggatact agccacagtg ctctccatcc cagagctcct gtacagtgc ctccagagga gcagcagtga gcaagcagtg cgtgctctc tcatacaga gcatgtggag gcctttatca ccatccaggt ggcacagatg gtgacggct tctggtccc cctgctggcc atgagcttct gtacactgtt ccatcccg cactgctcc accctgctcc aggcacgcaa ctttgcgcg aacaaggcca tcaagtgat cctgctgtg gtcgtggtt tcatagttt ccagctgccc tacaatggg tggctctggc ccagacgggt gccaaactca acatcacag tagcactgt gagctcagta agcaactcaa catgcctac gactcaact acagcctggc ctgogtccgc tgtgcgta acccttctt gtaagcctt atcggcgtca agttccgcaa cgtctcttc aagctcttca aggacctggg ctgcctcag caggagcag tccggcagtg gtcttctgt cggcacatcc ggcgctctc catgagtgt gaggcgaga ccaccaccac cttctccca taggcgactc tctgctctg actagaggga cctctcccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatccc ccgcaaaaag ctgctcaggg aaaagcagct ctccccctcag agtgcaagcc ctgctccaga agttagctt acccaatcc cagctacctc aaccaatgcc gaaaaagaca gggtgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccctctaa ccaaaaactg aaagtgaag tccagaaact gtccacact gctggagtga aggggccaag gagggtgagt gcaaggggctg tgggagtgcc ctgaagagtc ctctgaatga accttctggc ctccacaga ctcaaatgtc cagaccagct cttccgaaa ccaggcctta tctccaagc cagagatagt gggagagctt cttggcttgg tgaggaagaa cggacatcag ctgggtcaaac aaactctctg aacctctcc tccatcgttt tcttcaactgt cctccaaagc agcgggaatg gcagctgcca cgcggcccta aaagcacat cctccctca cttgccgct cgcctccca ggctctcaac aggggagagt gtggtgtttc ctgcaggcca	Homo sapiens
67	741	C-C Chemokine Receptor 7	NM_001838	gtgagacagg ggtagtgcga ggcggggcac agccttctctg tgtggtttta cgcgccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgctcatt ttccaggat gctgtgtgca agatgaggtc acgagcatt acatcgaga caacaccaca gtggactaca cttgttgcga gtctttgigc tccaagaagg acgtgcggaa ctttaaaagcc tggttcctcc ctatcatgta ctccatcatt tgtttcgtgg gcctactggg caatgggctg gtcgtgttga cctatatcta ttccaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc tgacacctc ccttctgggc ctacagcgcg gccaagtcct ggtctctcgg tgtccacttt tgcacagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctaactctt tgcacagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca cgcgccctg gcccgcgtcc ttctcatcag caaagctgtcc tgtgtgggca tctggatact agccacagtg ctctccatcc cagagctcct gtacagtgc ctccagagga gcagcagtga gcaagcagtg cgtgctctc tcatacaga gcatgtggag gcctttatca ccatccaggt ggcacagatg gtgacggct tctggtccc cctgctggcc atgagcttct gtacactgtt ccatcccg cactgctcc accctgctcc aggcacgcaa ctttgcgcg aacaaggcca tcaagtgat cctgctgtg gtcgtggtt tcatagttt ccagctgccc tacaatggg tggctctggc ccagacgggt gccaaactca acatcacag tagcactgt gagctcagta agcaactcaa catgcctac gactcaact acagcctggc ctgogtccgc tgtgcgta acccttctt gtaagcctt atcggcgtca agttccgcaa cgtctcttc aagctcttca aggacctggg ctgcctcag caggagcag tccggcagtg gtcttctgt cggcacatcc ggcgctctc catgagtgt gaggcgaga ccaccaccac cttctccca taggcgactc tctgctctg actagaggga cctctcccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatccc ccgcaaaaag ctgctcaggg aaaagcagct ctccccctcag agtgcaagcc ctgctccaga agttagctt acccaatcc cagctacctc aaccaatgcc gaaaaagaca gggtgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccctctaa ccaaaaactg aaagtgaag tccagaaact gtccacact gctggagtga aggggccaag gagggtgagt gcaaggggctg tgggagtgcc ctgaagagtc ctctgaatga accttctggc ctccacaga ctcaaatgtc cagaccagct cttccgaaa ccaggcctta tctccaagc cagagatagt gggagagctt cttggcttgg tgaggaagaa cggacatcag ctgggtcaaac aaactctctg aacctctcc tccatcgttt tcttcaactgt cctccaaagc agcgggaatg gcagctgcca cgcggcccta aaagcacat cctccctca cttgccgct cgcctccca ggctctcaac aggggagagt gtggtgtttc ctgcaggcca	Homo sapiens

68	741	C-C Chemokine Receptor 7	NP_001829.1	<p>ggccagctgc ctccgcgtga tcaaaagccac actctgggct ccagagtggg gatgacatgc  actcagctct tggctccact gggatgggag gagaggacaa gggaaatgtc agggcggggg  aggggtgacag tggcggccca aggccacgag ctgtgtcttt gttctttgtc acaggactg  aaacactctc ctcatgttct gcttcgatt cgttaagaga gcaacatttt acccacacac  agataaagtt ttcccttgag gaaacaacag ctttaaaag  MDLGKPMKSV LVVALLVTFQ VCLQDEVTG DYIGDNTVD YTLFESLCSK KDVNRPKAWF P  LPIMYSIIIF VGLLGNGLVW LTYIYFKRLK TMTDNTLLN AVADILFLT LPFWAYSAAK  SWVFGVHFCK LIFAIYKMSF FSGMELLICI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV  GIWILATVLS IPELLYSDIQ RSSEQAMRC SLITEHVEAF ITIQVAQMWI FLLVPLLLAMS  FCYLVIIRTL LQARNFERNK AIKVTIAVW VFIVFQLPYN GVLAQTIVAN FNITSSTCEL  SKQLNIAYDV TYSIACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGCLSQE QLRQWSSCRH  IRSSMSVEA ETTTFSP</p>	Homo sapiens
69	742	C-C Chemokine Receptor 8	AI733823	<p>TTTAAATTTA AAAACTTTAT TGGAAATAGCA TGTTAGCAGC AGTGAACAGG GCATGGCACA A  GAAGGTTTCC AAAACAAGTT TAGCATGAAG GATGCCATAT GCTGTTGCCA ACAACTAGAA  CACGGTGACT AAAGACACAG TTCTGAATGT CCAGCACAAAC CTCTGGCCTG CAACTATGTT  CAGTGATGAT GATAACAAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA  AAAAATGATG CTGACCTCCT TATATATGTA AAAATATATC CTTCAGAGTC CGTCAGTAAG  CTGGAAGAAG TGGATGTTGA AGTTTTTAAC ATCGATGATG GGTCTCCAGT TGTTTCATCAA  CCCATGGTGA AATAGCTGAA CGGTTCTGAA TCAAAAGGTGA TCCTAATAGT GAAGACATTA  ACATTGCAGA AAAAGTGCTT ACAGATTATA TGGTGAATAT ACGTGATGGG CTTCTTGAAG  GACTAGACGA GTGTGTATTC AAACAGAAC AAGAAATCAC GTCAGTTTAT  TGCCAAATAT GCTGTTGCCA ACACATTAGAA CACAATGACT GGAGACACAG TTGTGCGTGC A  CTGGCACAAAC CTCCAGCCTG TGCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT  TGAAGGATTT TGTATATCAA GTGAAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA  CATATACCTT CAAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAC  ATCATTAAAG AGGCTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGATT  CTGAATCAAG CTGATTATGA TAATAGTGAT GATGAAGATG ATGTTAATAC TGCAGAAAAA  GTGCCTATTA ATGACACAGT GAAAA</p>	Homo sapiens
70	742	C-C Chemokine Receptor 8	LG6770	<p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacagac tttgtgaaga A  aggaattggc aacactgaaa cctccagaac aaaggctgtc actaaggtcc cgctgccttg  atggattata cacttgacct cagtgtaga acagtgaccg actactata cctgatatc  ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagttgct ccttgctgtc  ttttattgcc tctgtttgt attcagtcct ctgggaaaca gcctggtcat cctggtcctt  gtggctgca agaagctgag gacatcaca gatgtatacc tcttgaacct ggcctgtct  gacctgcttt ttgtcttctc ctcccccctt cagacctact atctgctgga ceagtgggtg  tttggggactg taatgtgcaa agtgggtgctt ggcttttatt acattggctt ctacagcagc  atgtttttca tcacctcat gagtgtggac aggtacctgg ctgttgtcca tgcctgtgat  gccctaaagg tgaggacgat caggatgggc acaacgtgtt gcctggcagt atggctaacc  gccattatgg ctaccatccc attgctagt ttttaccagg tggcctctga agatgggtgtt  ctacagtgtt attcatttta caatcaacag actttgaagt ggaagatctt caccacttc  aaaatgaaca ttttaggctt gttgatccca ttcaccatct ttatgttctg ctacattaaa</p>	Homo sapiens
71	742	C-C Chemokine Receptor 8	NM_005201	<p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacagac tttgtgaaga A  aggaattggc aacactgaaa cctccagaac aaaggctgtc actaaggtcc cgctgccttg  atggattata cacttgacct cagtgtaga acagtgaccg actactata cctgatatc  ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagttgct ccttgctgtc  ttttattgcc tctgtttgt attcagtcct ctgggaaaca gcctggtcat cctggtcctt  gtggctgca agaagctgag gacatcaca gatgtatacc tcttgaacct ggcctgtct  gacctgcttt ttgtcttctc ctcccccctt cagacctact atctgctgga ceagtgggtg  tttggggactg taatgtgcaa agtgggtgctt ggcttttatt acattggctt ctacagcagc  atgtttttca tcacctcat gagtgtggac aggtacctgg ctgttgtcca tgcctgtgat  gccctaaagg tgaggacgat caggatgggc acaacgtgtt gcctggcagt atggctaacc  gccattatgg ctaccatccc attgctagt ttttaccagg tggcctctga agatgggtgtt  ctacagtgtt attcatttta caatcaacag actttgaagt ggaagatctt caccacttc  aaaatgaaca ttttaggctt gttgatccca ttcaccatct ttatgttctg ctacattaaa</p>	Homo sapiens

72	742	C-C Chemokine Receptor 8	NP_005192.1	MDVTLDLSVT TVTDYYYPDI FSSPCDAELI QTNKLLLLAV FYCLLFVPSL LGNSLVILVL P VVCKKLRISIT DVYLLNLALS DLLFVFSFPF QTVYLLDQWV FGTVMCKVVS GFYYIGFYSS MFFITLMSVD RYLAVVHAVY ALKVRITRMG TTLCLAVWLT AIMATIPLLV FYQVASEDGV LQCYSFYNQO TLKWKIFTNF KMNILGLLIP FTIFMFCYIK ILHQLKRCQN HNKTKAIRLV LIVVIASLLF WPFNVVJFL TSLHSMHILD GCSISQQLTY ATHVTEIISF THCCVNPVIY AFVGEKFKKH LSEIFQKSCS QIFNVIGRQM PRESCEKSSS CQHSRSSSS VDYIL	Homo sapiens
73	752	CXC Chemokine Receptor 3	NM_001504	ccaaccacaa gcaccaaacg agaggggcag gcagcacacc acccagcagc cacagcacca A gccagcccat ggtccttgag gtgagtgacc accaagtgt aatgacgcc gaggtgccc ccctccctga gaacttcagc tcttctatg actatggaga aaacgagagt gactcgtgt gtacctccc gccctgccca caggacttca gctgggggc cgcgcggcc ttcctgccag ccctctacag cctcctcttt ctgtgggggc tgcctgggcaa cggcgcggtg gcagccgtgc tgctgagccg gcggacagcc ctgagcagca ccgacacatt cctgctccac ctactgttag cagacacgct gctggtgctg acactgccgc tctgggcagc gacgctgcc gtccagtggg tctttggctc tggcctctgc aaagtggcag gtgcctctt caacatcaac ttctacgcag	Homo sapiens

atcttgacc agctgaagag gtgtcaaac cacaacaaga ccaaggccat caggttggtg  
ctcattgtg tcatgtcatc ttacttttc tgggtcccat tcaacgtggt tctttctc  
acttcttg acagtatgca catcttgat gtagtgaga taagccaaca gctgacttat  
gccaccatg tcaagaaat catttcttt actcactgt gtgtgaacc ttgtatctat  
gctttgtg gggagaagt caagaaacac ctctcagaa tattcagaa agttgcagc  
caatcttca actacctaag agacaaatg cctaggaga gctgtgaaa gtcacatcc  
tgccagcagc actcctccg tctctcagc gttagctaca tttgtgag atcaatgaag  
actaaatata aaaaacattt tcttgaatgg catgtatga cagtgagca aggtgtggg  
tgtgaaagt ttccaaaaa agttcagcat gaagatgcc atatatgtg ttgccaacac  
ttaaacaaca atgactggag acatagtgt acaagtgt aactttaa gattctgtat gccaagtga  
tgtgtttat gatgatgtg acaagtgt cttcatatgc aaaaatata cttcagagac tgcagtagg  
aaaaaagat gctgaccc ttcatatgc aaaaatata cttcagagac tgcagtagg  
ctggaagaag tggatattga agtttgaca tcaatgata gggtccagt gtctatgcat  
tgactgatg tgaatggct ggagtgttc tgaatcaagg tgattgtgat tatagtaca  
atgaagatga tgcattaat actgcataaa agtgcctgt agatgacatg gtgaaatat  
ttgacaggct tatggaaga ctacagcagc acgattcat aacagaacaa gaaattatct  
cagcttataa aatcaaacag agactctag aaaaaacca ttgttgata ggcagatgcc  
ttagaagaag acgtttaaaa gccatcaaac caatgcctc atcttccctg gaggaccac  
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aaaaaatat atattggtat gtaactacag gaaaaata aaaaatata agtgacagt  
aaccttcaa tcaaaactca gtatcataag tagagctga aaacttgccg ttattgatg  
ttgttattaa cagctgatac aggtattctg ctgatgctac tgcgcctag ttaccatga  
caggttttt cactattaat ggtgcgtcat atttttact ttaaagtact tacgtgtgag  
taagtgaag aaaaatgattg cttatcagta gtatcaatga ttactcaat atctgaatca  
ccttgattca gaaccatttc agctgtttca ccatcagta atgaataaca gcctcattga  
tgtcaaaaac ttcaatacc acttcttca gctactgta gactctggaa gtatactttt  
tgcaatgta aggaagtcat atttttttt



74	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctcct gctggcctgc atcagctttt accgtacct gaacatagtt catgccaccc  agctctaccg cggggggccc cggcccgcg tgacctcac ctgctggct gtctggggg  tctgctgct ttctgccc cagacttca tcttctgtc gggccaccac gacgagcgc  tcaacgccac ccaactgcaa tacaactcc cacagtggt cgcacaggt ctgctgggtgc  tgagctggt gctgggttt ctgtgccc tctgtgtct ggcctactgc tatgccaca  tcttggccgt gctgtggtt tccaggggcc agcgggccc cggggccatg cggctggtgg  tgggtggtcgt ggtggccttt gccctctgt ggaaccccta tcaactggtg gtgctggtgg  acatctcat ggacctgggc gctttggccc gcaactgtgg ccgagaaagc aggtagacg  tggccaagtc ggtcacctca ggcctgggt acatgacct ctgctctaac ccgtgctct  atgcttttgt aggggtcaag ttccgggagc ggaatgtggt gctgctctg cgcctgggt  gccccacca gagagggtc cagaggcagc catcgtctc cggccgggt tcatctggt  ctgagacctc agaggctcc tactcgggt tctgaggccg gaatccgggc tccccctg  ccacagctc gacttccc cttccaggc tctcctcc cctgcccgc tctgctctc  cccaatatcc tgcctcccg gactcactgg cagcccccag accaccagt ctcccggaa  gcccacctcc cagctctgag gactgacca ttgctgctc ttactgtgaa ctaaaactc  tgccgcccga ggtggtgctc tggagccca ttgctgctc catttgaaa ctaaaactc  atcttcccc aagtgcggga gtacaaggca tggcgtagag ggtgctgccc catgaagcca  cagccaggc ctccagctca cagtgactg tggccatggt ccccaagacc tctatatgt  ctcttttatt ttatgtctc aaatcctgct taaaacttt caataaaca gatcgtcagg  acaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa  MVLEVDHQV LNDAEVALL ENFSSYDYG ENESDSCCTS PFCQDFSLN FDFRFLPALY P  SLFLGLLG NGAAVAVLLS RRTALSTDT FLHLAVADT LVLTLPLWA VDAVQWVFG  SGLCKVAGAL FNINFYAGAL LLACISFDY LNIVHATQLY RRGPPARVTL TCLAVWGLCL  LFALPDFIFL SAHDERLNA THCOYNFPQV GRPALRLVLQ VAGFLPLLV MAYCYAHILA  VLLVSRGQRR IRAMRLVVV VVAFALCWTP YHLVVLVDIL MDLGLARNC GRESRVDVAK  SVTSGLGYMH CCLNPLLYAF VGVKFRERMW MLLRLGCPN QRLQRPSS SRRDSSWSET  SEASYSGL</p>	Homo sapiens
75	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa ggcgcccag ggcctgagt ctccagtagc A  caccgcatc ggagaaccag cggttaccat ggaggggac agtatataa cttcagataa  ctacaccgag gaaatgggt caggggacta tgactccatg aaggaacct gttccgtga  agaaaaatgct aatttcaata aaatcttct gccaccatc tactccatca tcttctaac  tggcattgtg ggaatggat tggctatcct ggtcattggt taccagaaga aactgagaag  catgacggac aagtacaggc tgaactgtc agtgccgac ctctctttt tcatcagct  tcccttctgg gcagttgat cctgggcaaa ctggtacttt ggaacttcc tatgaaggc  agtccatgtc atctacacag tcaactcta cagcagtgc ctcatcctgg ccttcatcag  tctggaccgc tacctggcca tctgtcacgc caccacagc cagaggccaa ggaagctgtt  ggctgaaaa gttgtctatg ttggcgtctg gatccctgcc ctcctgtga ctattccga  cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gcttctacc  caatgacttg tgggtggttg tgttccagtt tcagcacat atggttggcc ttactctgcc  tggattgtgc atcctgtct gctattgcat tatcatctc aagctgtcac actccaagg  ccaccagaag cgcaaggccc tcaagaccac agtcatctc atcctgctt tcttcgctg</p>	Homo sapiens

Accession	Gene	Protein	Species
753	CXC Chemokine Receptor 4	NP_003458.1	Homo sapiens
755	Complement Component 3a Receptor 1	NM_004054	Homo sapiens

78	755	Complement Component 3a Receptor 1	NP_004045.1	actgtgtga atgtgtctag catctgcaa tagttgcttt aatcccttcc tttatgcct cttggggaaa gatttttaga agaaagcaag gcagtcatt cagggaattc tggaggcagc cttcagtgag gagctcacac gttccacca ctgtccctca aacaatgtca tttcagaaa aatatgtaca MASFAETNS TDLSPWNE PPVILSMVIL SLTFLGLPG NGVLWVAGL KMQRTVNTIW P FLHLTLADLL CCLSLPFLA HLALQGWPY GRFLCKLIPS IIVLMEFASV FLLTAISLDR CLVVEKPIWC QNHRNVGMAC SICGCIWVA FVMCIPFVY REIFTTDNHN RCGYKFGLS SLDYPDFYGD PLENRSLENI VQPPGEMNDR LDPSSFQTHD HEWTVPTVFQ PQTFFQPSAD SLPRGSARLT SQNLYSNVFK PADVSPKIP SGFPIEDHT SLDNSDAFL STLKLFPSA SSNSFYSEL PQGFQDYNNL GQFTDDQVP TPLVAITITR IIVGFLPSV IMIACYSFIV FRMQRGRFAK SQSKTRFVAV VVAVFLVCW TPYHIFGLS LTDPETPLG KTLMSWDHVC IALASANS CF NFELYALLGK DERKKARQSI QGILEAAFSE ELTRSTHCPN NNVISERNST TV	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	agggggagcc caggagacca gaacatgaac tccttcaatt ataccacccc tgattatggg A cactatgatg acaaggatac cctggacctc aacacccctg tggataaaac ttctaacacg ctgcgtgttc cagacatcct ggccttggtc atctttgcag tgccttccct ggtgggagtg ctgggcaatg ccttggtggt ctgggtgacg gcattcgagg caagcggac catcaatgcc atctggttcc tcaacttggc ggtagccgac ttcctctcct gcttgccgt gccatcttg ttcacgtcca ttgtacagca tcaccactgg ccctttggcg gggccgcctg cagcatcctg ccctccctca tcctgctcaa catgtacgcc agcatcctgc tcctggccac catcagcgc gaccgcttcc tctgtgtgtt taaccacatc tgggtccaga acttccgagg ggcgggcttg gcttggtatcg cctgtgctgt ggttggggt ttgacctgc tgcagaccat accctcttc ctgtaccggg tgggtccggga ggagtaacttt ccacaaaagg tgttgtgttg cgtggactac agccacgaca aacggcggga gcagccgtg gccatcgtcc ggctggctct ggccttccctg tggcctctac tcacgctcac gatttgttac actttcatcc tgctccggac gtggagccgc agggccacgc ggtccacca gacactcaag gtgtggttg cagtgggtgc cagtttcttt atcttctggt tgcctacca ggtgacggg ataactgatgt ccttccctga gccatcttca ccacacttcc tgcgtctgaa taagctggac tcctgtgtg tctctttgc ctacataac tgctgcatca acccatcat ctacgtgtg gcggccagg gcttccagg cagactgcgg aaatccctcc ccagcctcct ccggaacgtg ttgactgaag agtccgtggt tagggagagc aagtcattca cgcgctccac agtggacact atggccaga agaccaggc agttaggagc acagcctcat gggccactgt ggcctcctgt ccccttctt cccggccatt ctccctctg tttccacttc acttttctg gtaggtgtgt acctagcta actaaactc ctccatgttg cctgtcttcc ccagacttgt cctctcttcc ccaggggac tcttctcat ctctctcat tgcaaggtga acacttctt ctaggagga cctctccacc cccaccccc cccacacac catcttcca tccaggctt ttgaaaaaca aacagaaacc cgtgtatctg gatatattcc atatggcaat aggtgtgaac agggaaactca gaatacacag aagtagaaa attctcgtt aaaaaatgt attatttta tggcaagtgt gaaatatgt aactggaatc tcaaaagtc tttgggacaa aacagaagtc catggagtta tctaagctct tgtaagttag ttaattttaa aaagaaaaat aggtgagag cagtggctca cgcctgtaac ccagaaact tgggaggtta aggtgggtgg atcacctgag gtcaagagtt ccagaccagg ctggccagca tgggtgaaacc	Homo sapiens

116/448

80	758	Complement Component 5a Receptor 1	NP_001727.1	<p>ccgtctgtac taataataca aaaaataaac tgggcatggt agtgggtgcc tgtaatccca</p> <p>gctaactggg aggtgaggt gggagaattg ctogaacctt ggaggtggag gttgtggtga</p> <p>gcatgatcg caccactgca ctctagcttg ggtgaccgag ggaggtcttg tctcaaaagc</p> <p>aaagcaaaaa caaaaaaaca aacacctaaa aacctcgag tttgtttgtt actttgtttt</p> <p>taattatgc tttctatttt gagatcattg caaactcaac acaattgtaa gtaatgatac</p> <p>agagggatct tgtgtacctt tcaccagcc tccccaatg gcaacatctt gcaaaactac</p> <p>aatgtagtct cataaccagg atattgacat tgatacagtg aagatacagg acattctcat</p> <p>caccacagg atccccagga tgcccacttc tctccacccc cacaccccag ccgtgtccct</p> <p>aacctctgg acccaggaaat ccactctcca tttctataat gttgtcattt caagaatggt</p> <p>attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaaaa gtatacatga</p> <p>ctttaatgag gaaaataaaa atgaatattg aaaaaaaa ctttagag</p> <p>MNSFNYYTPD YGHYDDKDTL DLNTPVDKTS NTLRVPDILA LVIFAVVFLV GVLGNALVWV P</p> <p>VTAFEAARTI NAIWFLNLAV ADFLSCLALP ILFTSIVQHH HWPFGGAACS ILPSLILLNM</p> <p>YASILLATI SADREFLIVFK PIWCQNFRA GLAWIACAVA WGLALLITIP SFLYRVVREE</p> <p>YFPPKVLGCV DYSHDKRRER AVAIVRLVLG FLWPLLTITI CYTFILLRTW SRRATRSTKT</p> <p>LKVVAVVAS FFIFWLPYQV TGINMSFLEP SSPTFLLLNK LDSLCVSFAY INCCINPIIY</p> <p>VVAGQGFQGR LRKSLPSLLR NVLTEESVVR ESKSFTRSTV DTMQKTQAV</p>	Homo sapiens
81	767	Calcitonin Receptor-like Receptor	NM_005795	<p>gcacgaggga acaacctctc tctctscagc agagagtgtc acctctgctt ttaggacctat A</p> <p>caagctctgc taactgaatc tcatctaat tgcaggatca ccttgcaaaag ctttcaactct</p> <p>ttcccacctt gcttgtgggt aaatctcttc tgcggaatct cagaaagtaa agttccatctc</p> <p>tgagaatatt tcacaaagaa tttccttaag agctggagctt ggtcttgacc cctggaattt</p> <p>aagaaattct taaagacaat gtcaaatatg atccaagaga aaatgtgatt tgagtctgga</p> <p>gacaatttg catatctctt aataataaaa acccatacta gcctatagaa acaatatatt</p> <p>gaataataaa aaccataact agcctataga aacaataatt tgaagaattg ctaccactaa</p> <p>aaagaaaact actacaactt gacaagactg ctgcaaaact caattgttca ccacaacttg</p> <p>acaagggtgc tataaaacaa gattgtctaca acttctagtt tatgtttatc agcatatttc</p> <p>atttgggctt aatgatggag aaaaagtga cctgtattt tctgggtctc ttgctttttt</p> <p>ttatgattct tgttacagca gaattagaag agagtcctga ggactcaatt cagttgggag</p> <p>ttactagaaa taaaatcatg acagctcaat atgaatgta ccaaaagatt atgcaagacc</p> <p>ccattcaaca agcagaaggc gtttactgca acagaacctg ggatggatgg cttctgtgga</p> <p>acgatgttg agcagggaact gaatcaatgc agctctgcc tgattacttt caggactttg</p> <p>atccatcaga aaaagttaca aagatctgtg accaagatgg aaactgggtt agacatccag</p> <p>caagcaacag aacatggaca aattataccc agtgaatgt taacaccac gagaagatga</p> <p>agactgcact aaatttgttt tacctgacca taattggaca cggattgtct attgcatcac</p> <p>tgcttatctc gcttggcata ttcttttatt tcaagagcct aagttgcca aaggattacct</p> <p>tacacaaaaa tctgttcttc tcatttgttt gtaactctgt tgtaacaatc attcacctca</p> <p>ctgcagttgc caacaaccag gccttagtag ccacaaatcc tgtagttgc aaagtgtccc</p> <p>agttcattca tctttaoctg atgggctgta attacttttg gatgctctgt gaaggcattt</p> <p>acctacacac actcatgtg gtggccgtgt ttgcagagaa gcaacattta atgtgggtatt</p> <p>attttcttgg ctggggattt ccactgattc ctgcttgat acatgccatt gctagaagct</p> <p>tatattacaa tgacaattgc tggatcagtt ctgataccca tctctctctac attatccatg</p>	Homo sapiens

82	767	Calcitonin Receptor- like Receptor	NP_005786.1	MEKKTLYFL VLLPFFMLV EGVYCNRTWD GWLCWNDVAA WTNYTQCNVN THEKVKTALN FFSFVCNSV TIHLTAVAN IVVAVFAEKQ HLMWYFLGW ALLVNLFFLL NIVRVLITKL AEEVYDIYIMH ILMHFQGLLV YTVYSTISDGP GYSHDCPSEH ggggactacg gagagctctg tcccaggagc caggggatgc gagctcagcc taatcaaga cacttccgc accatcaca agacatcaaa ggtgacatgg ttcctttagg ggaagtcctc	gccccatttg tgctgcttta ctggtgaatc ttttttctt gttaaatatt gtacgcgttc tcatcaccaa gttaaaagtt acacaccaag cgaatccaa tctgtacatg aaagctgtga gagctactct tatcttggtg ccattgcttg gcattgaatt tgtgctgatt ccatggcgac ctgaaggaaa gattgcagag gaggtatatg actacatcat gcacatcctt atgcacttcc agggtctttt ggtctctacc atttctgct tctttaatgg agaggttcaa gcaattctga gaagaaactg gaatcaatc aaaaatccaa ttggaacacag ctttcccaac tcagaagctc ttcgtagtcg gtcttacaca gtgtcaaca ttagtgatgg tccaggttat agtcatgact gtcctagtcg acacttaaat ggaataagca tccatgatat tgaataatgtt ctcttaaaac cagaaaaatt atataattga aaatagaagg atggttgtct cactgttttg tgccttctct aactcaagga ctgggaccca tgactctgta gccagaagac ttcaatatta aatgactttg gggaatgtca taaagaagag ccttcacatg aaattagtag tgtgttgata agagtgaac atccagctct atgtgggaaa aagaaaatcc tggtttgtaa tgtttgtcag taaatactcc cactatgcct gatgtgacgc tactaacctg acatcaccaa gtgtggaatt ggagaaaagc acaatcaact tttctgagct ggtgtaagcc agttccagca caccattgat gaattcaaac aaatggctgt aaaactaaac atacatgttg gccatgattc tacccttatt cscctcaaga gacctagcta aggtctataa acatgaaggg aaaattagct ttagtcttta aaactcttta tccatctctg attggggcag ttgacttttt tttttccca gagtgcgta gtcctttttg taactacctc ctcaaatgga caatacaga agtgaattat cctgctggc tttctttctt ctatgaaaag caactgagta caattgttat gatctactca tttgctgaca catcagttat atctgtggc atatccattg tggaactcgg atgaacagga tgtataatat gcaatcttac ttctatatca ttaggaaaac atcttagttg atgtacaaa acacctgtc aacctctcc tgtottacca aacagtggga gggaattcct agctgtaaat ataaatttg ccttccatt tctactgtat aaacaaatta gcaatcattt tatataaga aaatcaatga aggattctt atcttcttgg aattttgtaa aaagaaattg tgaataatga gcttgtaaat actccattat tttattttat agtctcaaat caatacata caactatgt aatttttaa gcaatataat aatgcaacaa tgtgtgtatg ttaatatctg atactgtatc tgggctgatt ttttaataa aatagagtct ggaatgct	Homo sapiens
83	832	Cannabinoid Receptor 1	NM_001840	gagagctctg A tccactttt cagtcattt ttgcagatac ttcagtagca ttcctttaac ccagcttagt	gagagctctg A tccactttt cagtcattt ttgcagatac ttcagtagca ttcctttaac ccagcttagt	Homo sapiens

84	Cannabinoid Receptor 1	NP_001831.1	<p> ccagcagac caggtgaaca ttacagaatt ttacaacaag tctctctcgt ccttcaagga  gaatgaggag aacatccagt gtggggagaa cttcatggac atagagtgtt tcatgtcct  gaacccagc cagcagctgg ccattgcagt cctgtccctc acgtctggca ctttcaagg  cctggagaac ctccctggtg tgtgcgtcat cctccactcc cgcagccctc gctgcaggcc  ttcctaccac ttcacatgga cctctggcgt ggcagacctc ctggggagtg tcattttgt  ctacagctc attgacttcc acgtgttcca ccgaaaagat agccgcaacg tgtttctgtt  caactgggt ggggtcacg cctcctcac tgcctccctg ggcagccctg tctcacagc  catcgacagg tacatatcca ttcacaggcc cctggccctat agaggattg tcaccaggcc  caaggccgtg tggcgctttt gctgatgtg gaccatagcc attgtgatg ccgtgctgccc  tctcctgggc tggaaactgcg agaaactgca atctgtttgc tcagacattt tcccacacat  tgatgaacc tacttgatg tctggatcgg ggtcaccagc gtactgcttc tgttcatcgt  gtatgcgtac atgtatatc tctggaaggc tcacagccac gccgtccgca tgattcagcg  tggacccag aagagcata tcatccacac gctgaggat ggaaggtac aggtgacccg  gccagaccac gcccgcatgg acattagttt agcaagacc ctggtcctga tctgtgtgt  gttgatcatc tgcctgggccc ctctgcttgc aatcatggtg tatgatgtct ttgggaagat  gaacaagctc attaagacgg tgtttgcatt ctgcagtatg ctctgcctgc tgaactccac  cgtgaacccc atcatctatg ctctgaggag taaggacctg cgacacgctt tccggagcat  gttccctct tgtgaaggca ctgcgagcc tctggataac agcatggggg actcgactg  cttgacacaa cagcaaaa atgcagccag tctcacagg gccgcagaaa gctgcataca  gagcacggtc aagattgcca agttaaccat gctgtgtgccc acagacacgt ctgccaggc  tctgtgagcc tgatgcctcc ctggcagcac aggaagaa tttttttt taagctcaaa  atctagaaga gtcattgtc tcttggtta tatttttta actttaccat gctcaatgaa  aagtgattg ccacatgtca cttatttgc ttagttccgt ttgggctaact cttccggggt  tcgtaggaaa ccttt </p>	Homo sapiens
85	Cannabinoid Receptor 2	NM_001841	<p> KMTAGDNPQL VPADQVNITE FYNKSLSSFK ENEENIQCGE NFMDIECFMV LNPSQQLAIA  VLSLTGTFV VLENLLVLCV ILHRSRLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHV  HRKDSRNVEL FKLGVTASF TASVGSLEFL AIDRYISIHR PLAYKRIVTR PKAVVAFCLM  WTIAIVIAVL PLLGNCKEL QSVCSDFPH IDETYLMFWI GVTSVLLEI VYAYMYILWK  AHSHAVRMIQ RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL  AIMVYDVFGK MNKLIKTVFA FCSMLCLLNS TVNPLIYALR SKDLRHAFRS MFPSCEGTAQ  PLDMSMGDSD CLHKHANNA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL  caggtcctg gagaggacag aaacaaactg gactcctcag cccccgcag ctcccagtgc A  ccagccacc acaacacac caaagcctt ctagacaaagc tcaagtgaat ctgaagggcc  caccocatg aggaatgctg ggtgacagag atagccaatg gctccaaagg tggcttggat  tccaacccta tgaaggatta catgatcctg agtggctccc agaagacagc tgttgcctg  ttgtgcactc tctgggccc gctaaagtgc ctggagaacg tggctgtgct ctatctgac  ctgtcctccc accaactccg ccggaagccc tcatacctgt tcaattggcag cttggctggg  gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaatttcca tgttttccat  ggtgtggatt ccaaggctgt ctctctgctg aagattggca gcgtgactat gaccttaca  gcctctgtg gtagcctct cctgaccgcc atgaccgat acctctgct gcgctatcca </p>	Homo sapiens

86	833	Cannabinoid Receptor 2	NP_001832.1	MEECWVTEIA NGSKDGLDSN PMKDYMLISG PQXTAVAVLC TLLGLLSALE NVAVLYLILS P SHQLRRKPSY LFIGSLAGAD FLASVVFACS FVNFVHFHV DSKAVFLLKI GSVTMTFTAS VGSLLLTAD RYLCLRYPPS YKALLTRGRA LVTIGIMWVL SALVSYLPLM GWTCPPRPCS ELFLIPNDY LLSWLLFIAT LFSGIITYYG HVLWKAHQHV ASLSGHQDRQ VPGMARMLD VRLAKTIGLV LAVLLICWFP VLALMAHSLA TTLSDQVKKKAF FAFCSMLCLI NSMVNPIYA LRSGEIRSSA HHCLAHWKVC VRGLGSEAKE EAPRSSVTET EADGKITPWP DSRDLDSDC	Homo sapiens
87	922	Leukocyte Antigen CD97	NM_001784	agcctgtgga gacgggacag ccctgtccca ctcactcttt ccctcgccgc tcctgcggcg A agctccaacc atgggagggc gcgtctttct cgcattctgt gctcgctga ctctgcgggg agctgaacc caggactcca ggggctgtgc ccgtgtgtgc cctcagaact cctcgtgtgt caatgccacc gctgtgcgt gcaatccagg gttcagctct ttttctgaga tcatcaccac ccgacggag actgtgtgac acatcaacga gtgtgcaaca ccgtcgaaaag tgtcatgogg aaaattctcg gactgtgga acacagaggg gactacgac tgcgtgtgca gcccgggata tgagcctgtt tctggggcaa aaacattcaa gaatgagagc gagaacacct gtcaagatgt ggacgagtc agtccgggc agcatcagtg tgacagctcc accgtctgct tcaacacct ggggttcatac agtgcgcgt gccgccagg ctggaagccc agacacggaa tccccgaataa ccaaaaggac actgtctgtg aagatatgac ttctccacc tggacccgc cccctggagt ccacagccag acgctttccc gattcttcca caaagtccag gacctgggca gagactccaa gacaagctca gccgaggtca ccatccagaa tgtcatcaaa ttggtggatg aactgatgga agctcctgga gacgtagagg ccctggcgcc acctgtccgg cacctcatag ccaccagct gctctcaac cttgaagata tcatgaggat cctggccaag agcctgccta aaggccccctt	Homo sapiens

88	922	Leukocyte Antigen CD97	NP_001775.1	<p>caccatacatt tccocttoga acacagagct gaccctgatg atccaggagc ggggggacaa gaacgtcaact atgggtcaga gcagcgcaag catgaagctg aattgggctg tggcagctgg agccgaggat ccaggccccc ccgtggcggg catctctcc atccagaaca tgacgacatt gctggccaat gcctccttga acctgcattc caagaagcaa gccgaactgg aggagataa tgaagcagc atccgtggtg tccaactcag acgcctctct gccgtcaact ccatctttct gagccacaac aacaccaagg aactcaactc ccccatcctt ttgccttct cccaccttga gtcctccgat ggggaggcgg gaagagaccc tctgtccaag gactgatgc ctggggccag gcaggagctg ctctgtgctt tctggaagag tgacagcagc aggggagggc actgggccac cgaggctgc caggtgctgg gcagcaagaa cggcagcacc acctgccaat gcagccacct gagcagctt acgataccta tggctcatta tgacgtggag gactggaagc tgacctgat caccagggtg ggaactggcg tgtcactctt ctgcctgctg ctgtgcaccc tcactttct gctggtgcgg cccatccagg gctcgcgac caccatacac ctgcacctct gcatctgct ctctgtggc tccacctct tctggccgg catcgagaac gaaggcgcc aggtggggct gcgtgcccgc ctggtggccg gctgctgca ctactgttc ctggccgctt tctgtggat gagctcgaa ggcctggagc tctactttct tgtgtgctgc gtgttccaa gccagggct gagtacgcgc tggctctgcc tgatcgcta tggcgtgccc ctgctcatcg tggcgctctc ggctgccac tacagcaagg gctacggcgg cccagatac tgcgtgttg actttgagca gggttccctc tggagcttct tgggacctgt gaccttcatc attttgtca atgtgtcat ttctgtgact accgtctgga agctcactca gaagttttct gaaatcaatc cagacatgaa gaaattaaag aaggcgaggc cgctgacctc caaggccatc gcgcagctct tctgttggg ctgcacctgg gtctttggcc tgttcatctt cgacgatcgg agcttggctg tgacctatgt gtttaccatc ctcaactgcc tgcaggcgc ctctctctac ctgtgcact gcctgctcaa caagaagggt cgggaagaat accggaagtg ggctgccta gttgctgggg ggagcaagta ctcagaattc acctccacca cgtctggcac tggccacaat cagaccggg cctcagggc atcagagtc gccatatgaa ggcgcagtgt tctggacggc ccagcagctc ctgtggccac agcagcttg tacacgaaga ccatccatcc tccctctgc caccactcta ctcctccac cctccctccc tgatcccgctg tgccaccagg aggagtgcc agctatagtc tggcaccaaa gtccaggaca cccagtgggg tggaagtcgga gccactggtc ctgtgctgg ctgctctct gtccacctt gtgacccagg gtgggacag gtactcggga cagactaagg gcgcttgcc catcctggac tgccctggca cctgtggcca gtactcggga ggcctggccc agggctgcaa tgcagcatgt tttctctc atgtctttgc tgcagaactg aagagactag gcgctggggc tcagctccc tcttaagcta agactgatgt cagaggcccc atggcaggc ccttggggc cactgctga ggctcacgtt acagaggcct gcctgacctg gccgggcagg aggttctcac tgttgaag gtgtgagacg ttgtgtaatg tgttttctc tgttaaaatt ttctagttt gacactaaa attaaacaca tgcatacaga aaaaaaaaaa a</p>	<p>Homo sapiens</p>
				<p>P</p>	



89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL PAFSHLESSD GEAGRDPAPK DVMPGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSSF TILMAHYDVE DWKLTILITRV GLALSFLCLL LCILTFLLVR PIQGSRTTIH LHLICICLFVG STIFLAGIEN EGGQVGLRCR LVAGLLHYCF LA AFCWMSLE GLELYFLVVR VFQGGGLSTR WLCLIGYGVV LLIVGVSAAI YSKGYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TWKLTQKFS EINDMKKLK KARALITITAI AQLFLLGCTW VFGLFIFDDR SILVLYVFTI LNCLOQAFLY LLHCLLNKKV REEYRKWACL VAGGSKYSEF TSTTSGTGN QTRALRASES GI	Homo sapiens
			ctaaagtgtt ttcttttgaa tgacagaact acagcataat gcgtggcttc aacctgtcc A tcttctgggg atgttgtgtt atgcacagct ggaagaggga cataagacc acacgaaac caacacaaa gggtataaac tgtagagaca gtacctgtg cccagcttat gccacctgca ccaatcgggt ggacagttac tattgeactt gcaacaagg ctctctgtcc agcaatgggc aaaatcactt caaggatcca ggagtgcgat gcaagatat tgatgaatgt tctcaaaagcc cccagccctg tggctcctaac tcactctgca aaacctgtc agggaggtac aagtgcagct gtttagatgg ttctcttctt cccactggaa atgactgggt cccaggaaa cgggcaatt tctcctgtac tgatatcaat gagtgcctca ccagcagggt ctgccctgag cattctgact gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcacc tctagaaact ccactgtga agacgtgaat gaattgagc tactctgtt tctgcaacc aggatttgaa tccagcagt gtaataaac tgttggaac tactctgtt tctgcaacc aggatttgaa tgcactgaaa gccacttgag ttgccagggt ctcaaaagcat cgtgtgaaag tattgatgaa tgcactgaaa tgtgccccat caattcaaca tgaccaaca ctctctggag ctacttttgc acctgccacc ctggcttgc accaagcagt ggacagtga attcacaga ccaaggaggt gaattgagag atattgatga gtgcgccaa gatccatcaa cctgtgtgtc taattctatc tgcaccaatg cctgggctc ctacagctgt ggctgcattg tagcttttca tcccaatcca gaaggtctcc agaaagatgg caacttcagc tgccaaagg ttctcttcaa atgtaaggaa gatgtgatac ccgataataa gcagatccag caatgccaa gggaaccgc agtgaacct gcatagtctt ccttttgtc acaataaat aacatcttca gcgttctgga caaagtgtgt gaaaataaaa cgaccgtagt ttcttgaaag aatacaactg agagctttgt cctgtgtgtt aaacaatat ccatgtggac taaattcacc aggaagaga cgtctctcctt ggccacagtc ttcttgaga gtgtggaaa catgacactg gcattctttt ggaaccctc agcaaatgtc actcggctg ttcggggcga atacttagac attgagagca agttatcaa caaagaatgc agtgaagaga atgtgacgtt ggacttggtta gccaaagggt ataagatgaa gatcgggtgt tccacaattg aggaatcga atccacagag accactgtgt tggctttgt ctctttgtg ggcattggaat cggttttaa tgagcgttc ttccaagacc accaggtctc cttgaccacc tctgagatca agctgaagat gaattctoga gtggtgggg gcataatgac tggagagaag aaagcgggt tctcagatcc aatcatctac actctggaga acgttcagcc aaagcagaag tttagagggc ccatctgtgt ttcttgagc actgatgtga aggttggaag atggacatcc tttagctgtg tgatcctgga agctctgtag acatatacca tctgcagctg taatcagatg gcaaatctg cogttatcat ggcgtctggg gactcactga tggacttttc cttgtacatc attagccatg taggcattat catctcctt gtgtgcctcg tcttgacctt cggccactt ctgctgtgtc gtcccatccg aaatcacac acctacctc acctgacct ctgcgtgtgt ctctcttgg cgaagactct ctctctgcc ggtatacaca agactgaca caagacgggc tgcgccatca	

90	941	EMR1 Hormone NP_001965.1	MRGFNLLFW	GCCVMHSEWG	HIRPTRKPNV	KGNNCRDSTL	CPAYATCTNT	VDSYYCTCKQ	P	Homo sapiens
			GFLSSNQNH	FKDPGVRCCKD	IDECSPQSP	CGPNSSCKNL	SGRYKCSCLD	GFSSPTGNDW		
			VPGKPGNFSC	TDINECLTSR	VCPEHSDCVN	SMGSYSCSQ	VGFISRNSTC	EDWNECADPR		
			ACPEHATCNN	TVGNYSFCFN	PGFESSGHL	SCQGLKASCE	DIDECTEMCP	INSTCTNTPG		
			SYFCTHPGF	APSSGQLNFT	DQGVCECRDID	ECRQDPSTCG	PNISCTNALG	SYSCGCIVGF		
			HPNPEGSQKD	GNFSCQVLF	KCKEDVIPDN	KQIQCCQEGT	AVKPAYVSFC	AQINNIFSVL		
			DKVCENKTV	VSLKNTTESF	VPVLKQISMW	TKFTKETSS	LATVFLESVE	SMTLASFWKP		
			SANVTPAVRA	EYLDIESKVI	NKECSEENV	LDLVAKGDKM	KIGCSTIEES	ESTETTGVAF		
			VSVGMESVL	NERFQDHQA	PLTTSEIKLK	MNSRVVGGIM	TGEKKDGFSD	PIIYTLENVQ		
			PKQKFERPIC	VSWSTDVKGG	RWTSFGCVIL	EASETYTICS	CNQMANLAVI	MASGELTMDF		
			SLYIIISHVGI	IISLVCLVLA	IATFLLCRSI	RNHNTYILHL	LCVCLLLAKT	LFLAGIHKTD		
			NKTGCAIAG	FLHYLFLACF	FWMLVEAVIL	FLMVRNLKVV	NYFSSRNIMK	LHICAFGYGL		
			PMLVVISAS	VQPGYGMHN	RCWLNTETGF	IWSFLGPVCT	VIVINSLLLT	WTLWILRQL		
			SSVNAEVSTL	KDTRLITFKA	FAQLFILGCS	WVLGIFQIGP	VAGWMAYLFT	IINSLQAFI		
			FLIHCLNGQ	VREYKRWIT	GKTKPSSQSQ	TSRILLSSMP	SASKTG			
			ggaaaacgac	acctagaagt	aggagtga	ttcgtgaag	ttccctctg	aggaaagacc	A	Homo sapiens
			acccctccgc	ctggagagcc	ggggctggcg	gtgcctgagg	accccttcgg	cctggacagc		
			ccacgcgggc	ttggggggcc	tcgctctgcc	ctcatggggc	ggccatcggt	tcccgaagcg		
			gcgagtga	attcaaatgg	ccagtggggg	gcgcactcgg	aagtgggcgc	ccgcgatgag		
			gcagttcagc	ggccccgaga	gtccggggag	ggaggtttat	tctccgcctg	cacgagactg		
			tgaatccgc	aacctagagc	aggagagggc	gccctgggtg	ggaaagagcc	accaacatct		
			ggacggcagg	taccagaga	gtgagcagct	ccacgcggga	ctgtgcacgg	tggccgacac		
91	965	G Protein-Coupled Receptor GPR30	NM_001505							

ccgacaggac gccgcgcgga cgagcacgag gaggccctc gctccacgg atgcaccatg  
 ccggtgtgag gagcatctgt tcttccact ctctgcagtt acaaaacca accaaaacca  
 ccacaggcgc tctctctggg gatttctctg tctgacaaat gccaggctca cttaaggag  
 aateacgctt ctttctaaag atggattcac catttaaac agagctctgg gacctttctg  
 gcaaatcttg aaagtgcac ggcgcagaga catgatgtg acttcccaag cccggggcgt  
 ggccctggag atgtaccag gcaccgcga gccctggcc aatgggacag gtgagctctc  
 gctcaacctg tcccaccgc tctgggac cgccctggc cctctctg cctacacca tcttctctt  
 ggagaccag cagtaactga tccgctgtt cctctctg cctacacca tcttctctt  
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 caagcaccac gcccgctga gctgtggcct catctggatg gcatcctgt cagccacgct  
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 tgtccgggag gtgcagtgcc tgcaggtcac gctgggcttc atcgtgcct tcgcatcat  
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Homo

P

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PAAPNTTSPE

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G Protein-

965

92



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96	1103	Corticotropin releasing factor	NP_001874.1	MDAALLHSLI EANCSLALAE ELLLDGNGPP LDPEGPYSYC NTLDQIGTC WPSAAGALV P ERPCEYFNG VKYNTTRNAY RECLENGTWA SKINYSQCEP ILDDKQKRYD LHYRIALVN YLGHCVSVAALVAALLFLA LRSIRCLRNVLHNLITTFI LRNVWFFLLQ LVDHEVHESN	atggagcgcg cactgtctca cagcctgctg gaggccaact gcagcctggc gctggtgaa A gagctgctct tggagcgctg ggggccacc ctggaccctg aggttcccta ctctactgc aacacgacct tggaccagat cggaaactgc tggccccgca gcgctgcgg agccctgctg gagagccctg gcccgagta cttcaacggc gtaagtaca acagaccg gaatgctat cgagaatgct tggagaatgg gacgtggcc tcaaatgata actactaca gtgtgagccc atttggatg acaagcagag gaagtatgac ctgcactacc gcctgcctt tgtgtcaaac tacctgggcc actgcgtatc tgtggcagcc ctgtgctg ccttctctgt tttctggcc ctggagaca ttgcgtgtct gcggaatgtg attcactgga acctcatcac cacctttatc ctgcgaaatg tcatgtgtt cctgtgtcag ctgttgacc atgaagtga cgagagcaat gaggtctgtt gccactgcat caccaccatc ttcaactact tegtgtgac caactttctc tggatgtttg tggaaaggctg ctacctgcac acggccattg tcatgacct ctcactgag cgctgcgca agtgcctctt cctcttcac gtagtgtga tccccctccc catcatgtc gccctgggcca tgggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct ggcgacctgg tggactacat ctaccaaggc ccatcattc togtgtctct gatcaattc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacgcgcgtc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgcc cctcctgggc atcacctaca tgcctctctt cgtcaatccc gggagaggag acctgtcaca gatcatgttc atctatttca actccttctt cagtcgttc caggtttct tegtgtctg ttctactgc ttcttcaatg gagaggtgct ctacgcgtg aggaagaggt ggcacgcgtg cgaggacctc cactccttc ggtccccat ggccccggcc atgtccatcc ctacatcac cacacggatc agcttcaca gcatcaagca gacggcgtct gtgtgacccc tegtgcgcc acctgcacag ctccccgtc ctctccacc ttcttctctt ggtttctctg tegtggcgag gctctgtgg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaagggg gactgcaagg gacagggatg agtgggggcc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcatttg cccatccag cctctctggc caggccctta ctgggccag agcagagaag gacctgtcca acacacacag ctatttatag tagcagacac agggctcccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggaact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaggga tcagtttggc tgcctatcc cagggtctgc acctagagag gctcacttgt accccacct gtctctgtgt cccctcccc gccatctccc ccgcttggg ggtcccatga aggatgcagg ctccagggc tggcttctc tcttgggaga ccctctctct gctagtcca cagattaggc aatacaggaa gacgccata gggagaccac atccttagtc aaccagttgc atcgtgcggg gcaaatag gagcagaggc atggaggagg gagggtggg atgggaatag cagaaccacc atgtcttcag tgattgaaac tcatacccca ttgcctttg cctccagtc tccccctcag aaacatctct gctctctgtg aaataaacca tgcctcttg	Homo sapiens

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127/448

98	1240	Dopamine Receptor D1	NP_000785.1	<p> MRTLNTSAMD GTGLVVERDF SVRILTFACFL SLLILSTLLG NTLVCAAVIR FRHLRSKVTN P  FFVISLAVSD LLVAVLVMPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILNLCVISVD  RYWAISSPFR YERKMPKAA FILISVAWTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA  ETIDNCDSSL SRTYAISVV ISFYIPVAIM IVTYTRIYRI AQKQIRRIAA LERAAVHAKN  CQTTTGNGKP VECSPESSE KMSFKRETKV LKTLSSVIMGV FVCCWLPPFI LNCILPFCGS  GETQPFIDS NTFDVFVWFG WANSSLNPII YAFNADFRKA FSTLLGCYRL CPATNNAIET  VSINNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSSED LKKEEAAGIA RPLEKLSPAL  SVILDYTDV SLEKIQITQ NGQHPT  ggcagcaggc agggctgaag ttgggacgcg gcaacagaccg ccctgcagt ccagcccgaa A  atgctgccgc caggcagcaa cggcaccgcg taccggggc agtgcgtct ataccagcag  ctggcgccag ggaacgcct ggggggctcg gcggggggc cggcactggg gccctcacg  gtgtccaccg cctgcctgct gacctactc gacctactc cctgcctggg caacgtgctg  gtgtgcgcag ccatcgtgcg gacgcgcac ctggcgccca acatgaccaa cgtcttcac  gtgtctcttg ccgtgtcaga cctttctgtg gcgtgcctg toatgacctg gaaggcagtc  gccgaggttg ccggttactg gccctttgga gcgtctgcg agtctgggt ggccttcgac  atcatgtgct ccactgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggccttccg ctacaaagcg aagatgactc agcgcagtcg cttggtcatg  gtcggcctgg catggacct gtccatctc atctcttca ttccggtcca gctcaactgg  cacagggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaaactgg  acgacctggg aggaggactt ttggggagccc gacgtgaatg cagagaaactg tgactccagc  ctgaatcgaa cctacgccat ctctctctcg ctcatcagct tctacatccc cgttgccatc  atgatcgtga cctacacgcg catctaccgc atgcgccag tgcagatccc caggatttcc  tccctggaga gggccgcaga gcacgcgcag agctgccgga gcagcgcagc ctgcccgcgc  gacaccagcc tgcgccttc catcaagaag gagaccaag ttctcaagc cctgtcgttg  atcatggggg tcttcgtgtg ttgctggctg ccttcttca tcttaactg catggtccct  ttctgcagtg gacacctga aggcctccg gccggcttcc cctgcgtcag tgagaccacc  ttcgacctct tctctggtt cggctgggt aactcctcac tcaaccccg catctatgcc  ttcaacgccg actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca cttctgctcc  cgcacgccg tggagacggt gaacatcagc aatgagctga tctctacaa ccaagacatc  gtcttcaca aggaatcgc agctgcctac atccacatga tgcacaacgc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggtcctt tcatcgcat gtccagatc </p>	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcagcaggc agggctgaag ttgggacgcg gcaacagaccg ccctgcagt ccagcccgaa A  atgctgccgc caggcagcaa cggcaccgcg taccggggc agtgcgtct ataccagcag  ctggcgccag ggaacgcct ggggggctcg gcggggggc cggcactggg gccctcacg  gtgtccaccg cctgcctgct gacctactc gacctactc cctgcctggg caacgtgctg  gtgtgcgcag ccatcgtgcg gacgcgcac ctggcgccca acatgaccaa cgtcttcac  gtgtctcttg ccgtgtcaga cctttctgtg gcgtgcctg toatgacctg gaaggcagtc  gccgaggttg ccggttactg gccctttgga gcgtctgcg agtctgggt ggccttcgac  atcatgtgct ccactgcctc catcctgaac ctgtgcgtca tcagcgtgga ccgctactgg  gccatctcca ggccttccg ctacaaagcg aagatgactc agcgcagtcg cttggtcatg  gtcggcctgg catggacct gtccatctc atctcttca ttccggtcca gctcaactgg  cacagggacc aggcggcctc ttggggcggg ctggacctgc caaacaacct ggccaaactgg  acgacctggg aggaggactt ttggggagccc gacgtgaatg cagagaaactg tgactccagc  ctgaatcgaa cctacgccat ctctctctcg ctcatcagct tctacatccc cgttgccatc  atgatcgtga cctacacgcg catctaccgc atgcgccag tgcagatccc caggatttcc  tccctggaga gggccgcaga gcacgcgcag agctgccgga gcagcgcagc ctgcccgcgc  gacaccagcc tgcgccttc catcaagaag gagaccaag ttctcaagc cctgtcgttg  atcatggggg tcttcgtgtg ttgctggctg ccttcttca tcttaactg catggtccct  ttctgcagtg gacacctga aggcctccg gccggcttcc cctgcgtcag tgagaccacc  ttcgacctct tctctggtt cggctgggt aactcctcac tcaaccccg catctatgcc  ttcaacgccg actttcagaa ggtgtttgcc cagctgctgg ggtgcagcca cttctgctcc  cgcacgccg tggagacggt gaacatcagc aatgagctga tctctacaa ccaagacatc  gtcttcaca aggaatcgc agctgcctac atccacatga tgcacaacgc cgttaccccc  ggcaaccggg aggtggacaa cgacgaggag gagggtcctt tcatcgcat gtccagatc </p>	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p> tatacagcgt cccagatgg tgacctgtt gctgagtctg ttggggagct ggactggcag  ggggagattt cttagacaa aataaacct ttaacccga atggattcca ttaactgca  ttaagaaaacc ccctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca  cgcaaatata tgcctttcca gtgctgtcc ctttatcatg tgtttctgtg tagtagctcg  tgtgttaga aacctcacc cattgattgg tagttcgaag aattggcaga atcagttgca  ataaactcag tcaaatgtac ccagcctacc agagatggac caacgatcct atgagagaag  agagtatggt gctgggtcct taataaaaaa aatgatactt ggtccttaaa aaatatgtc  tccccctcct ttttaacaa atggctgtgt cagtcacttg tttgtgtttg aattgatttt  taaacagcag gttgtgtgtg tgtgcagtga tgtgtgtgga gcacagcttt cctgggtctg  gattcccggt gctttgtgct tatgtcattt cttctctctg tgctgtgtgg ggcctcttta  ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataaacacag attatttgta  aaaaaaaaa aaaaaaaaaa aa  MLPPGNGTA YPGQFALYQQ LAQNAVGGG AGAPPLGPSQ VVTACLLTLL IIWTLGNVL P  VCAAIVRSRH LRAMTNVFI VSLAVSDLFV ALLVMPKAV AEVAGYWPFG AFCDVWVAFD  IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTILSIL ISFIPVQLNW  HRDQAASWGG LDLPNNLANW TPWEEDFWEF DVNAENCDS LNRTYAISSS LISFYIPVAI  MIVTYTRIYR IAQVQIRRI SLEAAEHAQ SCRSSAACAP DTSLRASIKK ETKVLKTLV  IMGVFCWCL PFFILNCMPV FCSGHPEGPP AGFPCVSETT FDFVWFQWA NSSLPVITYA  FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAY IHMPNAVTP  GNREVDNDEE EGPFDRMFOI YQTSPPDPPV AESWELDCE GEISLDKITP FTPNGFH  agagcctggc caccagtggt ctccaccgcc ctgattggat cactgaatct gtcctggtat A  gatgatgac tggagaggga gaactggagc cggcccttca acgggtcaga cgggaaggcg  gacagacccc actaacaata ctatgcaca ctgtccacc tgcctcagc tgcctcagc  ttcgggcaacg tctgtgtgtg catggtgtgt tcccgagga aggcgctgca gaccacacc  aactaactga tctgcagcct cgcagtgccc gacctcctcg tgcacacact ggtcatgccc  tgggttgtct acctggaggt gtaggtgag tggaaattca gcaggattca ctgtgacatc  ttcgtcactc tggacgtcat gatgtgcacg gcgagcatcc tgaacttgtg tgccatcagc  atcgacaggt acacagctgt ggccatgcc atgtgtaca atacgcgcta cagctccaag  cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcaccat ctcccgcca  ctcctcttcg gactcaataa cgcagaccag aacgagtga tcaattgcaa cccggccttc  gtggtctact cctccatcgt ctctctctac gtgcccttca ttgtcaccct gctggtctac  atcaagatct acattgtcct ccgcagacgc cgaagcagag tcaacaccaa acgcagcagc  cgagctttca gggccacct gagggtcca ctaaaggga actgtactca ccccgaggac  atgaacctct gcaccttat catgaagtct aatgggagtt tccagtgaa cagcgagaga  gtggaggctg cccggcgagc ccagagctg gagatggaga tgcctccag caccagccca  cccgagagga cccggtacag ccccatccca cagcactccc ccagccacc accagctgac tctcccgac  cgtcccccac atggtctcca cagcactccc gacagccccg ccaaacccaga gaagaatggg  catgccaag accaccccaa gattgccaag atctttgaga tccagacctat gcccaatggc  aaaacccgga cctccctcaa gaccatgagc cgtaggaagc tctccagca gaaggagaag  aaagccactc agatgtcgc cattgtctc ggcgtgttca tcatctgtg gctgccttc  ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc </p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p> tatacagcgt cccagatgg tgacctgtt gctgagtctg ttggggagct ggactggcag  ggggagattt cttagacaa aataaacct ttaacccga atggattcca ttaactgca  ttaagaaaacc ccctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca  cgcaaatata tgcctttcca gtgctgtcc ctttatcatg tgtttctgtg tagtagctcg  tgtgttaga aacctcacc cattgattgg tagttcgaag aattggcaga atcagttgca  ataaactcag tcaaatgtac ccagcctacc agagatggac caacgatcct atgagagaag  agagtatggt gctgggtcct taataaaaaa aatgatactt ggtccttaaa aaatatgtc  tccccctcct ttttaacaa atggctgtgt cagtcacttg tttgtgtttg aattgatttt  taaacagcag gttgtgtgtg tgtgcagtga tgtgtgtgga gcacagcttt cctgggtctg  gattcccggt gctttgtgct tatgtcattt cttctctctg tgctgtgtgg ggcctcttta  ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataaacacag attatttgta  aaaaaaaaa aaaaaaaaaa aa  MLPPGNGTA YPGQFALYQQ LAQNAVGGG AGAPPLGPSQ VVTACLLTLL IIWTLGNVL P  VCAAIVRSRH LRAMTNVFI VSLAVSDLFV ALLVMPKAV AEVAGYWPFG AFCDVWVAFD  IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTILSIL ISFIPVQLNW  HRDQAASWGG LDLPNNLANW TPWEEDFWEF DVNAENCDS LNRTYAISSS LISFYIPVAI  MIVTYTRIYR IAQVQIRRI SLEAAEHAQ SCRSSAACAP DTSLRASIKK ETKVLKTLV  IMGVFCWCL PFFILNCMPV FCSGHPEGPP AGFPCVSETT FDFVWFQWA NSSLPVITYA  FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI VFHKEIAAY IHMPNAVTP  GNREVDNDEE EGPFDRMFOI YQTSPPDPPV AESWELDCE GEISLDKITP FTPNGFH  agagcctggc caccagtggt ctccaccgcc ctgattggat cactgaatct gtcctggtat A  gatgatgac tggagaggga gaactggagc cggcccttca acgggtcaga cgggaaggcg  gacagacccc actaacaata ctatgcaca ctgtccacc tgcctcagc tgcctcagc  ttcgggcaacg tctgtgtgtg catggtgtgt tcccgagga aggcgctgca gaccacacc  aactaactga tctgcagcct cgcagtgccc gacctcctcg tgcacacact ggtcatgccc  tgggttgtct acctggaggt gtaggtgag tggaaattca gcaggattca ctgtgacatc  ttcgtcactc tggacgtcat gatgtgcacg gcgagcatcc tgaacttgtg tgccatcagc  atcgacaggt acacagctgt ggccatgcc atgtgtaca atacgcgcta cagctccaag  cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcaccat ctcccgcca  ctcctcttcg gactcaataa cgcagaccag aacgagtga tcaattgcaa cccggccttc  gtggtctact cctccatcgt ctctctctac gtgcccttca ttgtcaccct gctggtctac  atcaagatct acattgtcct ccgcagacgc cgaagcagag tcaacaccaa acgcagcagc  cgagctttca gggccacct gagggtcca ctaaaggga actgtactca ccccgaggac  atgaacctct gcaccttat catgaagtct aatgggagtt tccagtgaa cagcgagaga  gtggaggctg cccggcgagc ccagagctg gagatggaga tgcctccag caccagccca  cccgagagga cccggtacag ccccatccca cagcactccc ccagccacc accagctgac tctcccgac  cgtcccccac atggtctcca cagcactccc gacagccccg ccaaacccaga gaagaatggg  catgccaag accaccccaa gattgccaag atctttgaga tccagacctat gcccaatggc  aaaacccgga cctccctcaa gaccatgagc cgtaggaagc tctccagca gaaggagaag  aaagccactc agatgtcgc cattgtctc ggcgtgttca tcatctgtg gctgccttc  ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc </p>	Homo sapiens



102	1242	Dopamine Receptor D2	NP_000786.1	<p> gctttcacgt ggctgggcta tgtaacacgc gcgtgaacc ccatcatcta caccaccttc  aacattgagt tccgcaaggc cttcctgaag atctccact gctgactctg ctgctgccc  gcacagcgc ctgcttccca cctccctgcc caggccggcc agctcacc ttgcaaccg  tgacaggaa ggctgggtg gatggctc ctctcttag ccccggaagg cctgcagtg  ttcgtttggc tccatgctcc tcactgccg cacacctca ctctgccagg gcagtgtag  tgagtgggc atggtaccag cctggggct ggccccagct caggggcagc tcatagatc  ccccccca cctccagtc cctatcctt ggaccaaa atgcagcgc cttcctgac  cttctctgg ggctctagg ctgctgagc tgagtaggc gccagagc tgagtttct  ctttgtggg cttggcgtgg agcaggcgtt gggagagat ggacagtta caccctgcaa  ggccacagg aggcaagcaa gctctctgc cgaggagcca ggcaactta gtctgggag  acctatgaa ataccagact gcaggttggc cccagagat tcccaagcca aaaccttag  ctccctccg caccctgat tggacctcta cttccagg tagtccggc ccacctcacc  ccgttacgc tcccaagt gttcccat gctctgaga gaggagcct catcttgaag  ggccaggag ggtctatgg gagaggaact cctggccta gccaccctg ctgcttctg  acggccctgc aatgtatccc ttctcacgc acatgttggc cagcctggg cctggcaggg  aggtcaggcc ctggaaactct atctggcct gggttagga catcagaggt tctttgagg  actgctctg ccacactctg acgaaaaacc acttctctt tctattcct ctggccttc  ctctctctg ttccctctc cttccactg cttgcctta gaggagcca cggtaagag  gctgctgaaa acctctggc ctggcctggc cctgccccga ggaaggagg gaagtgcag  cttgggagag cccctgggc ctgactctg taacatcact atccgatgca ccaactaat  aaaacttga cgagtcacct tc </p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p> taaagaaaac ggatacattc gaaagcagct atgaacatg cactaagtc taataggaa A  gctggaaaaag cagcactcaa gtaatttcac cttagaggca aaaaagggtg atttcttct  gttcatttca tagtttctga gtccctgaaa aggcataagt tgccttgctt gggatgtct  gctgtcagta aatggctgca ggagccgaag tggtaacct ctcgggtctc agaaatcaga  agaaaattt aggaagccc ttggcatcac gcactccct ctgggctatg gcactctga  gtcagctgag tagccacctg aactacact gtggggcaga gaactccaca ggtgccagcc  agccccccc acatgcctac tatgacctc cctactcgc gctcactctg gccatgctct  tcggcaatgg cctgggtgctc atggctgtgc tgaaggagcg ggccctgag actaccaca  actactagt agtgagcctg gctgtggcag actgtctggt ggccacctg gtgatgcct  gggtggtata cctggagggt acaggtggag tctggaatt cagccgcat tgcgtgtatg  ttttgtcac cctggatgtc atgatgtga cagccagcat cctaatctc tgtgccatca  gcatagacag gtacactgca gtggtcatgc ccgttacta ccagcatggc acgggacaga </p>	Homo sapiens

104	1243	Dopamine Receptor D3	NP_000787.1	<p>gctcctgtcg ggcgctggcc ctcatgatca cggcgcgtcg ggtactggcc ttgtgtgtgt  cctgcectct tctgtttggc tttaatacca caggggaccc cactgtctgc tccatctcca  accttgattt tgtcatctac tcttcagtgg tgtccttcta cctgccccctt ggagtgaactg  tccttgctca tgcagaatc tatgtgtgc tgaacaacaa gagacggaaa aggatectca  ctgacagaa cagtcagtgc aacagtgtca ggcctggctt ccccaacaa accctctctc  ctgacccggc acatctggag ctgaagcgtt actacagcat ctgccaggac actgccttgg  gtggaccagg cttccaagaa agaggaggag agtgaagaag agaggagaag actcggaatt  ccctgagtcc caccatagcg cccaagctca cttgaagaat tgaaaaaact agcaatggca  gattatcgac atctttgaag ctggggcccc tgaacctcg gggagtgcca cttcgggaga  agaaggcaac caaatgggtg gccattgtgc ttggggcctt cattgtctgc tggctgcctt  tctcttgac ccatgttctc aataccact gccagacatg ccacgtgtcc ccagagcttt  acagtggcac gacatggctg ggctacgtga atagcgccct caacctgtg atctatacca  ccttcaatat cgagttcccg aaagccttcc tcaagatcct gtcttgctga gggagc  MASLSQLSSH LNYTCGAENS TGASQARPHA YYALSYCALI LAIVFNGLV CMAVLKERAL P  QTTNYLVVS LAVADLLVAT LMPWVYLE VTGGWNFSR ICCDVFVTL DVMCTASILN  LCAISIDRYT AVMPVHYQH GTGQSSRRV ALMITAVWL AFAVSCPRLF GFNTTGDPV  CSISNPDEFI YSSVSYFLP FGVTVLYAR IYVVLKQRR KRILTRQNSQ CNSVRPGFPQ  QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGSELKREE KTRNSLPTI APKLSLEVRR  LSNGRLSTSL KLGPLQPRGV PLREKATQM VAIVLGAFIGV CWLPFFLTHV LNTHCQTCHV  SPELYSATW LGYVNSALNP VIYTFNIEF RKAFILKILSC</p>	Homo sapiens
105	1244	Dopamine Receptor D4	NM_000797	<p>atggggaacc gcagacccg gcagcggac gggctgtctg cttggcgccg gccggcgccg A  ggggcatctg cgggggcac tgcggggctg cttgggcagg gcgcggccg cttgggtggg  ggcgtgctgc tcatcgccg ggtgtctcg ggaactcgc tctgtgtgtg gacgtggcc  accgagcgcg cctgcagac gccacacaa tcttctatg tgagcctggc gccgcgcgac  ctctcctcg ctctcctggt gctgcgcgc tctgtctact ccgaggtcca ggtggcgcg  tggctgtga gccccgcct gtgcgacgc ctcattggca tggacgtcat gctgtgcacc  gcctccatct tcaacctgtg cgccatcagc gtggacaggt tctgtggcct gccgtggccg  ctgcgctaca accggcaggg tggagcccg cggcagctgc tctcatcgg cggcagctgg  ctgctgtccg cggcgtggc ggccccgta ctgtgcggc tcaacagat gcgcggccgc  gaccccgcg tgtgcgcct ggagaccgc gactacgtgg tctactctc cgtgtgtctc  ttcttctac cctgcccgt catgtgtgtg ctctactgg ccacgttccg cggcctgcag  cgtgggagg tggcagctg cgccagctg cagggcccg cggccccg acccagggc  cctggcccg cttccccac gccaccccg cccgcctcc cccagacc cttgcggccc  gactgtgc ccccgccg cggccttcc cgggttcc cggccccga cttgtgcgcc  gccgccccg gctcccc cggacctgc gggccccg gggccccg cgcgccggc  ctccccag accctgcgg ccccgactgt gggccccg cggccccg tccccgggt  cctgcggc cggactgtg ccccccg cggcgctcc cccagacc cttgtgtccc  gactgtgc ccccgccg cggcctccc cggagacct cgggctccaa cttgtgtccc  ccgacgcg tcaagaccg cggctccc cggacctc caccgagac ccgagagg  cggcgtgcca agatcacgg ccggagcgc aaggccatga ggtcctgcc ggtgtggtc  ggggccttc tctgtgtgtg gacgcccctt tctgtgtgtg acatcacgca ggcgtgtgt</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p>cctgctgct cagtgcctcc gcggtggtc agcgcgtca cctggtggtg ctacgtcaac  agcgcctca acccgtcat ctacactgtc ttcaacgcg agttccgcaa cgtcttccgc  aaggccctgc gtgcctgctg ctgagccggg caccocggg cgtgatggcc  agcctcagg gaccaaggag atggggagg cgcttttga cgttaattaa acaattcct  tccc</p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p>MGNRSTADAD GLLAGRGPA GASAGASAGL AGQAAALVGVLLIGAVLA GNSLVCVSVAP  TERALQTPTN SFIVSLAAD LLLALLVLP FVYSEVQGA WLLSPRLCDA LMAMDVMLCT  ASIFNLCAIS VDRFVAVP LRYNRQGSR RQLLIGATW LLSAAVAAPV LCGLNDVRGR  DPAVCRLEDR DYVYSSVCS FFLPCPLMLL LYWATFRGLQ RWEVARRAKL HGRAPRRPSG  PGPSPPTPA PRLPQDPCG DCAPPAPGLP RGCPGDCAP AAPGLPPDPC GPDCAPPAPG  LPQDFCGPDC APPAPGLPRG PCGPDCAPPA PGLPQDPCG DCAPPAPGLP PDPCGSNCAP  PDAVRAAALP PQTTPQTRRR RRAKITGRER KAMRVLPVVV GAFLLCWTFP FVWHITQALC  PACSVPPRLV SAVTWLGYVN SALNPVIYTV FNAEFNRVFR KALRACC</p>	Homo sapiens

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	ccaggaaggc ggggcttcaa ccttgagaca gcttcggttt ctaacttgga gccggacttt cggagttggg gggctcgggg ccc AVGLLGNLV MFGIVRYTKM KTATNIYIFN LALADALATS TLPFQSAKYL METWPFGE LL CKAVLSIDYY NMFTSIFILT MMSVDRIYAV CHPVKALDER TPAKAKLINI CIWVLASGVG VPIMMAVTR PRDGAUVCM L QFPSPSWYMD TVTKICVFLF AFWVPILIT VCYGLMLLRL RSVRLLSGSK EKDRSLRIT RMVLVVGAF VVCWAPIHIF VIVWTLVDID RRDPLVVAAL HLCIALGYAN SSINPVLVAF LDENFKRCFR QLCRKPCGRP DPSSFSPRPRE ATARERV TAC TPSDPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggctgaac caaacggcgc catggggaac tgtctgcaca gggtagtat ggggccaggc A cccagagtcc cttatcccta tgccctcat tcccctgct gttgcccc cagtctttat atctcttcc tttctctcctc atcttttctc ccttcccgct ttttccctct tcttcaaaag tcttttctct tctctcttc ctatgctagc ctctagatgc cctcttggtt cctccctttt gcctttgagt cagttccatc ctggtctctt ggtgcctttc ctctgacct tgcactgctc ctccagcccc agctgccctg gcttccccag gactgttctt gctccggctc ttcaggctcc ctgctttgtc cttttccact gtccgcactg catctgactc ctgcagagac cttgtttctc cacccgacct tctctctgt cctccctcc cactgcccc tcaattccca ggagactctt ccggtgtaac tctgatggcc tctctgggt atgtctcca ggcggagctc tcccccaa ctgagaactc agtcagctg gactcgaag atgtatgaa tcttctctat ggttgaaatg attcttccc agatggagac tatgatgcca acctggaagc agctgcccc tgcactcct gtaacctgct ggatgactct gcactgccct tcttcatcct caccagtgc ctgggtatcc tagctagcag cactgtctc tcatgtctt tccagacctc ctccgctgg cagctctgcc ctggctggcc tgtctcggca cagctggctg tgggcagtc cctcttcagc attgtggtgc ccgtcttggc cccagggcta ggtagcactc gaagctctgc cctgtgtagc ctgggctact gtgtctgcta tggctcagcc ttggccagg ctttggctgct aggtgacct gctccctgg gccacagact gggcgaggc caggctccag gctcaccct gggctcact gtgggaattt ggggagtggc tgcctactg acactgcctg tccacctggc cagtgggtct tctggtggac tctgcacct gatatacagc acggagctga agcctttgca ggcacacac actgtagcct gtcttgccat ctttgtcttg ttgccattgg gtttggtttg agccaaaggg ctgaagaagg cattgggtat ggggccaggc cctgggatga atatccttg ggcctggttt attttctggt ggctcctagg ggtggttcta ggaactggatt tccgtggtgag gtccaagctg ttgctgtgtg caacatgtct gggccagcag gctctggacc tgcgtgtgaa cctggcagaa gccctggcaa ttttgcactg tgtgctacg cccctgctcc tgcctctatt ctgccaccag gccaccgca ccctcttggc ctctctgccc ctccotgaag gatggtcttc tcatctggac accctggaa gcaaatccta gttctcttc cactgtcaa cctgaattaa agtctacct gccttctg DSALPFFILT SVLGILASST VLFLMFRPLF RWQLCPGPV LAQLAVGSAL FSIVVPVLAP P 110 1424 Duffy Antigen	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccacca ccaatggata tacaatggc aaacaatttt A actcgcct ctgcaactcc tcagggaaat gactgtgacc tctatgcaca tcacagcacg gccaggatag taatgcctct gcattacagc ctgctcttca tcattgggct cgtgggaaac ttactagcct tggctgctcat tgttcaaac agaaaaaaa tcaactctac caccctctat tcaacaaatt tggtgatttc tgatatactt ttaccaccg ctttgcctac acgaatagcc tactatgcaa tgggcttttga ctggagaatc ggagatgcct tgtgtaggat aactgcgcta gtgttttaca tcaacacata tgcagggtgtg aactttatga cctgcctgag tattgacgc ttcattgctg tgggtgaccc tctacgctac acaagataa aaaggattga acatgcaaaa ggcgtgtgca tattgtctg gattctagta ttgctcaga cactccact cctcatcaac cctatgtcaa agcaggaggc tgaagattt acatgcatgg agtatccaaa ctttgaagaa actaaatctc ttccctggat tctgctggg gcattgttca taggatatgt acttccactt ataatcattc tcatctgcta ttctcagatc tcttgcaaac tcttcagaac tgcacaaaca aaccactca ctgagaaatc tgggttaaac aaaaaggctc tcaacacaaat tattcttatt attgttgtgt ttgtctctctg ttccacacct taccatgttg caattattca acatatgatt aagaagcttc gtttctctaa ttctctgtaa ttaggccaaa gacattcgtt ccagatttct ctgcacttta cagtatgcct gatgaacttc aattgctgca tggacccttt tatctacttc tttgcattga aagggtataa gagaagggtt atgaggatgc tgaacggca agtcagtgtga tcgatttcta gtgctgtgaa gtcagccct gaagaaaat cactgaaat gacagaaaag cagatgatga tacattccaa gtcttcaaat ggaagtga atggattgta ttttggttta tagtgacgta aactgtatga caaacttgc aggaattccc ttataaagca aaataatgt tcagcttcca attagtattc ttttatattt ttttcatgtg gcactttccc atctccaact cggagtaag ccaagagaa caacataaag caacaacat aaagcacaat aaaaatgcaa ataaatattt tcatttttat ttgtaacga atacacaaa aggagggcct cttaataaact cccaatgtaa aaagttttgt ttaataaaa aatttaatta ttatttcttg ccaacaaatg gctagaaaag actgaataga ttatatattg ccagatgta atactgtaac atacttttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gtttgtttc gtctgggtc ataaaacttt gtaagggaac tcttttgga taagagcag gatgctgc	Homo sapiens
112	1451	EBV-Induced Gene 2	NP_004942.1	MDIQMANNFT PPSATPQND CDLYAHSTA RVMPLHYSL VFIIGLVGNL LALVIVQNR P KKINSTTLYS TNLVISDILF TTALPTRIAY YAMGFDWRIG DALCRITALV FYINTYAGVN FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCIFWILVF AQTLPILLINP MSKQEAERIT CMEYENFEET KSLPWILLGA CFIGYVLP LIILICYSQIC CKLFRTAKQN PLTEKSGVYK KALNTIILII VVFLCFTPY HVAIIQHM IKLRFSNFLEC SORHSFQISL HFTVCLMNFN CCMDBFIYFF ACKGYKRKVM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHKSNSG K	Homo sapiens
113	1486	Endothelin B Receptor	NM_000115	gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcat tggcccggt ggagcgctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactgggaa ggaactggta cttggagctt ggacatctga aacttggctc tgaactgcg cagcggccac cggagcctt ctggagcagg tagcagcatg cagcgcctc caagtctgtg cggacggccc ctggttctgc tggttcttgc ctgcgccctg tcgcgatctt ggggagagga gagaggcttc ccgcctgaca gggccactcc gcttttgcaa	Homo sapiens

accgcagaga taatgacgcc accactaag acctatggc ccaagggttc caacgccagt  
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tataatactt ttaaaaagaa aattattaca tcccttacct tcagttaaga tcaaacctca  
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gctatagtta aaatactatt ttcaaaaatc atacagatta gtacatttaa cagctacctg  
taaagcttat tactaatttt tgtattattt ttgtaaatag ccaatagaaa agtttgcttg

114	1486	Endothelin B NP_000106.1 Receptor	<p>           acatggtgct tttctttcat ctgaggcga aactgctttt tgagaccgta agaacctctt            agctttgtgc gttctgtgct aattttata tcttctaagc aaagtgcctt aggatagctt            gggatgagat gtgtgtgaaa gtatgtacaa gagaaacgg gagagagagg aaatgaggtg            gggttggagg aaacctatgg ggacagattc ccattcttag cctaactgtc gtcattgctt            cgtcacatca atgcaaaaagg tcttgatttt gttccagcaa aacacagtcg aatgttctca            gagtgccttt cgaataaaat tgggcccagg agctttaact cgttcttaaa atagcccga            attttactt tgttttctt ttaataggct gggccacatg ttggaataaa gctagtaatg            ttgtttctg tcaatatga atgtgatgtt acagtaaac aaacccaac aatgtggcca            gaaagaaga gcaataataa ttaattcaca caccatattg attctattta taaatcacc            acaaaactgt tctttaattt catcccaatc agcttttcag aggcctgtta tcatagaagt            ctttttagac tctcaatttt aaattaattt tgaatcacta atattttcac agtttattaa            tataattaat tttctattta attttagatt atttttatta ccatgtactg aatttttaca            tcttgatacc ctttctctt ccatgtcagt atcatgtct ctaattatct tgccaaattt            tgaactaca cacaanaagc atacttgcatt tatttataat aaatttgcatt tcatgtgctt            tttaaaaaa atgtttgatt caaaacttta acatactgat aagtaagaaa caattataat            tttcttacct actcaaaacc aagatagaaa aagtgctat cgttcaactt caaaacatgt            ttcttagtat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgtta            cagctcaaaa gatttataaa agattttaac ctattttctc cctattatc cactgctaatt            gtggatgtat gttcaaacac cttttagtat tgatagotta catatggcca aaggaataca            gtttagca aacatgggt atgtgttagc taacttata aagtgtaaat ataacaatgt            aaaaaattat atactggga ggttttttg gttgcttaaa ttggtctatg ttaactgattt            tttattatgt aagcaaaacc aataaaaatt taagtttttt taacaactac cttatttttc            actgtacaga cactaattca ttaataacta attgattgtt taaaagaaat ataaatgtga            caagtggaca ttatttatgt taaatatata attatacgc aagtatgaag ttattcaatt            aaaaatgccac atttctggtc tctggg         </p>	Homo sapiens
115	1488	Endothelin A NM_001957 Receptor	<p>           SLARSLAPAE VPKGDRTAGS PPRISPPPC QGPIETKETF KYINTWWSCL VFVLIIGNS            TLLRIIYKNK CMRNGPNILI ASLALGDLIH IVIDIPINVY KLIAEDWPFQ AEMCKLVPFI            QKASVGITVL SLCALSIDRY RAVASWSRIK GIGVPKWTAV EIVLIWVSV VLAVPEAIGF            DIITMDYKGS YLRICLLHPV QKTAFMQFYK TAKDWLFSF YFCLPLAITA FFYTLMTCEM            LRKKSQMQIA LNDHLKQRR VAKTVFCLVL VFALCWLPPLH LSRLKLTLY NQNDPNRCEL            LSFLLVLDYI GINMASLNSC INPIALYLV KRFKNCFKSC LCCWCQSFE KQSLEEKQSC            LKFKANDHGY DNFSSNKYS SS            gaattgcgg cgcctcttg cggctccaga gtggagtga aggtctggag ctttggagg A            agacggggag gaagactgg aggcgtgttc ctcggagtt tctttttcg tgcgagccct            cgcgcgcgg tacagtcat cgcgtggtc gagattgtg gagagcggtt ggagaggtt            catccatccc acccgtcgt cgcggggat tggggtccca ggcacaccc cccgggagaa            gcagtgccca ggaagtcttc tgaagccggg gaagctgtg agccgaagcc gccgcgcgc            cggagccgg gacaccggc accctccgg ccaccacc cgccttttc cgccttctc            tggccaggc gccgcggga cccggcagct gtctgcgac gccgagctcc acggtgaaaa            aaaaagtga ggtgtaaaag cagcacaagt gcaataaag atatttctc aaatttgcct         </p>	Homo sapiens

caagatggaa accottggc tcaggggcac cttttggctg gcactgggtg gatgtgtaat  
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cacctcctat tctottaatt ttgttaaaa tgttaactgg cagtaagtct ttttgtatca  
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116	1488	Endothelin A Receptor	NP_001948.1	<p>           METCLRAFSLALVGCVTSDNPERYSTNL SNHVDDFTTF RGTELSFLVT THQPTNLVLP            SNGSMHNYCP QOTKITSFAK YINTVISCTI FIVGVGNAT LIRIIYQNK MRNGPNALIA            SLALGDLIY VIDLPINVEK LLAGRWPFDDH NDFGVFLCKL PFPLQKSSVG ITVLNLCALS            VDRYRAVASW SRVQIGIGIPL VTAIEIVSIW ILSFILAPE AIGFVMVPE YRGEQHKTCM            LNATSKFMEF YQDVKDWLFL GFYFCMPLVC TAIPTYTLMT EMLNRRNGSL RIALSEHLKQ            RREVAKTVFC LVVIFALCWF PLHLSRLKK TVYNEMDKNR CELLSFLILM DYIGINLATM            NSCINPIALY FVSKKFKNCF QSCLCGCCYQ SKSLMTSVPM NGTSIQWKNH DQNNHNTDRS            SHKDSMN         </p>	Homo sapiens
117	1598	Calcium- Sensing Receptor (CASR)	NM_000388	<p>           caacaggcac ctggctgcag ccaggaaagga ccgcacgccc ttctcgcgag gagagtggaa A            ggaggagct gtttgccagc accgaggtct tggggcacag gcaacgcttg acctgagtct            tgcagaatga aaggcatcac aggagcctc tgcattgatgt ggcttccaaa gactcaagga            ccaccacat tacaagtctg gattgaggaa ggcagaaatg gagattcaaa caccacgtct            tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgcaggag tgaactgtc            caaggagaa acttctggga gccccaac tctagctgt ctcacctt gccctggaga            gacggcagaa ccatggcatt ttatagctgc tctgggttc tcttggcact cacctggcac            acctctgctt acgggccaga ccagcgagcc caaaagaag gggacattat ccttgggggg            ctctttccta ttcattttgg agtagcagt aagatcaag atctcaaatc aagccggag            tctgtggaat gtatcaggta taatttcctt gggtttcgtt ggttacaggc tatgatattt            gccatagagg agataaacag cagccagcc ctcttccca acttgacgt gggatacagg            atatttgaca cttgcaacac cgtttctaag gcttgggaag ccacctgag tttgttgtt            caaaacaaaa ttgattcttt gaaccttgat gacttctgca actgctcaga gcacattccc         </p>	Homo sapiens

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acctctttg cctgctggg cattttcctg acagcctttg tgctgggtgt gttatacaag  
ttccgcaaca caccattgt caaggccacc aaccgagagc tctcctacct cctcctcttc  
tccctgctct gctgcttctc cagctcctg ttcttcctg gggagccca ggactggacg  
tgccgctgc gccagccggc ctttggcatc agcttcgtgc tctgcatctc atgcatcctg  
gtgaaaaaca accgtgctc cctggtgttt gaggccaaga tccccaccg cttccaccgc  
aagtgggtgg ggctcaact gcagttcctg ctggttttcc tctgcaactt catcagatt  
gtcatctgtg tgatctggct ctacacgcg ccccccicaa gctaccgcaa ccaggagctg  
gagatgaga tcatcttcac cactgccac gagggtccc tcatggccct gggcttctg  
atcggctaca cctgctgct gctgcatc atcaacttca gcagtctcat cttctcactc  
ctgcccggga acttcaatga agccaagttc atcaacttca gcagtctcat cttctcactc  
gtctggatct ccttcattcc agcctatgcc agcacctatg gcaagtttgt cctgcccgt  
gagtgattg ccatcctggc agccagcttt ggcttgctgg cgtgcatctt cttcaacaag  
atctacatca ttctcttcaa gccatccgc aacaccatcg aggagtgctg ttgcagcacc  
gcagctcacg ctttcaaggt ggctgcccgc gccagctgc gccgcageaa cgtctccgc  
aagcgggtcca gcagccttgg aggtccacg ggtccacc cctcctctc catcagcagc  
aagagcaaca gcgaagacc atccacag ccgagaggc agaagcagca gcagcgtg  
gcctaacc agcaagagca gcagcagcag ccctgacct tcccacagca gcaacgatct

118	1598	Calcium- Sensing Receptor (CASR)	NP_000379.1	MAFYSCCVL IALTWHTSAY GPDQRAQKKG DIILGGLFPI HFGVAAKDQD LKSRPESVEC P IRYNFRGFRW IQAMIFAIEE INSSPALLPN LTGLYRIFDT CNTVSKALEA TLSFVAQNKI DSLNLDEFNC CSEHIPSTIA VVGATGSGVS TAVANLLGLF YIPQVSYASS SRLLSNKNQF KSELRTPND EHQATAMADI IEYFRWNWVG TIAADDDYGR PGIEKFREEA EERDIDICDFS ELISQYSDDEE EIQHVVEVIQ NSTAKVIWVF SSGPDLEPLI KEIVRRNITG KIWLASEAWA SSSLIAMPQY FHVVGGTIGF ALKAGQIPGF REFLLKKVHPR KSVHNGFAKE FWEETFNCHL QEGAKGPLPV DTFRLGHEES GDRFSNSTA FRPLCTGDEN ISSVETPYID YTHLRISYNV YLAVYSIAHA LQDIYTCPLG RGLFTNGSCA DIKKVEAWQV LKHLRHLNFT NNMGEQVTFD ECGDLVGNYS IINWHLSPED GSIVFEVGY YNVYAKKGER LFINEEKILW SGFSREVPFS NCSRDLAGT RKGIIIEGPT CCFECVECPD GEYSDETDAS ACNKCPDDEFW SNEHTSCIA KEIEFLSWTE PFGIALTLFA VLGIFLTAFV LGVFIKFRNT PIVKATNREL SYLLLFSLIC CFSSSLFFIG EPQDWTCLRL QPAFGISFVL CISCILVKTN RVLLVFEAKI PTSFHRKWWG LNLQFLLVFL CTFMQIVICV IWLYTAPPSS YRQLELEDEI IFITCHEGSL MALGFLIGYT CLLAACICFFF AFKSRKLPEN FNEAKFITFS MLIFFIWIWIS FIPAYASTYG KFVSAVEVIA ILAASTFGLLA CIFFNKIYII LFKPSRNTIE EVRCSTAHA FKVAARATLR RSNVSRKRSS SLGSTGSTP SSSISSKSNS EDFPQPERQ KQOQLALTQ QEQQQQLTL PQQQRQQQP RCKQKVIKGS GTVTFSLSD EPQKNAMAHG NSTHONSLEA QKSSDTLTPH QPLLPLQGE TDLDLTQVQET GLQGPVGGDQ RPEVEDPEEL SPALVVSSSQ SFVISGGST VTENVVNS ggcacagga acaacctatt tgcaagttg gcgcaaatc tcctgcctga caggaccatg A gacacaggtt gtagagatat agatggctct ggctgtgcat tcagcagatt ctgtagatag aattaatagg acttggatgg gattgtggtg agagaaagt aaatgaaaga taagtcttag tttggaagt ttaacaactg aatgtttaa ctcaaataga cacaataat tggaagagtg gcaggtttg gaggatgaga caatcaactg ttgtgttag ccacgttagg ttgaaatgt ctacgggac ccgtggggag aggttatatc agactggagc accagagaga ggccaaggct gatagtttag atgaaaagag agcatgatat ttaagccct gagactggat aatatcacct atagaaagac tatatagaga taagagaggt gggaacaag taaaagctgc gggacactcc taaattaga gtcaaattta gaggagaaa tactagcaa ggggactgaa aagcgtggc caattgagct tcaaatgcaa gtgaaagtgt gtgtgtgta cattatcat ctcatggcac aggaaaaacg tgatttaagg agaagagc gtcccaatgg gaagaagaga tccaatggat cctctatcac gaagatatgg agataagaac caatatggat ttgcaccac tgcatttgca gccttgaggt cataagcatc ctacagaaaa tgcaccaggt gctgctggca agatgaaac	Homo sapiens
119	1676	Formyl Peptide Receptor- Like Receptor	NM_001462	ggcacagga acaacctatt tgcaagttg gcgcaaatc tcctgcctga caggaccatg A gacacaggtt gtagagatat agatggctct ggctgtgcat tcagcagatt ctgtagatag aattaatagg acttggatgg gattgtggtg agagaaagt aaatgaaaga taagtcttag tttggaagt ttaacaactg aatgtttaa ctcaaataga cacaataat tggaagagtg gcaggtttg gaggatgaga caatcaactg ttgtgttag ccacgttagg ttgaaatgt ctacgggac ccgtggggag aggttatatc agactggagc accagagaga ggccaaggct gatagtttag atgaaaagag agcatgatat ttaagccct gagactggat aatatcacct atagaaagac tatatagaga taagagaggt gggaacaag taaaagctgc gggacactcc taaattaga gtcaaattta gaggagaaa tactagcaa ggggactgaa aagcgtggc caattgagct tcaaatgcaa gtgaaagtgt gtgtgtgta cattatcat ctcatggcac aggaaaaacg tgatttaagg agaagagc gtcccaatgg gaagaagaga tccaatggat cctctatcac gaagatatgg agataagaac caatatggat ttgcaccac tgcatttgca gccttgaggt cataagcatc ctacagaaaa tgcaccaggt gctgctggca agatgaaac	Homo sapiens

120	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	caacttctcc atctcctctga atgaatatga agaagtgtcc tatgagcttg ctggctacac tgttctgcgg atcctcccat tgggtgtgct tggggtcacc tttgtcctcg gggctctggg caatgggctt gtgatctggg tggctggatt ccgatgaca cgcacagtca ccaccatctg ttacctgaac ctggccctgg ctgacctttc ttccacggcc acattaccat tctcattgt ctccatggcc atgggagaaa aatggccttt tggctgggtc ctgtgtaagt taattcacat ctgtgtggac atcaacctct ttggaagtgt ctctgttggt ggtttcatg cactggaccg ctgcatttgt gtccctgcac cagctgtggc ccagaaccac cgcactgtga gtctggccat gaagtgatc gtccggacctt ggattcttgc tctagtctt accctgccc ttttctctt tttagactaca gtaactattc caaatgggga cacatactgt actttcaact ttgcatactg ggggtggacc cctgaggaga ggctgaaggt ggccattacc atgctgacag ccagagggat tatccggttt gtcatgtgct ttagtctgcc gatgtccatt gttgccatct gctatgggct cattgcagcc aagatccaca aaaaggccat gattaaaacc agccgtccct tacgggtccct cactgtctg gtggcttctt tcttcatctg ttggtttccc ttccaactgg ttgcccttct gggcaccgtc tggctcaag agatgttgtt ctatggcaag tacaaaatca ttgacatcct ggttaaccca acgagctccc tggccttctt caacagctgc ctcaacccca tgccttaact cttgtgggc caagacttcc gagagagact gaccactcc ctgccacca gtctggagag ggcctgtct gaggactcag ccccaactaa tgaccactgc gccaatcttg attcactcc tgcagagact gagttacagg caatgtgagg atgggggtcag ggatatattg agttctgttc atctacacct aatgccagtt ccagcttcat ctacccttga gtcataattga ggcattccaag gatgcacagc tcaagtattt attcaggaaa aatgcttttg tgcctctgat ttggggctaa gaaatagaca gtcagggtac taaaatatta tgtttatttt ttgttttttg actctgcct ataccctggg gtaagtggag ttgggaaaaa caagaagaga aagaccagtg gggatttgtga agacttagat gagatagcgc atataaagg gaagacttta aagtataaag taaaatgttt gctgtaggt ttttatagct attaaaaaaa atcagattat ggaaagtctt tctattttt agtttgctaa gagtttctg tttcttttct ttacatcatg agtggacttt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc tcttctttt atgtaaatca ttataaataa tgttcattaa gttctgaatg ttaaaactact cttgaattcc tggaaataaac cacacttagt cctgatgtac tttaaatatt tatatctcac aggagttggt tagaatttct gtgtttatgt ttatatactg ttatttcaact ttttctacta tcttgctaa gttttcatag aaaaataagga acaaaagaaa acttgaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg ttttctgtg ttatatcttt attaaaattt cagaaaaatt c	Homo sapiens
121	1681	Follicle Stimulating Hormone Receptor	NM_000145	LDRCICVLHP VWAQNHRIVS LIVSMAMGEK WPRGWFLCKL IHIVVDINLF GSVFLIGFIA ASWGGTPEER LKVIWTFMLTA RGIIRFVIGF SLPMISIVAIC YGLIAAKIHK KGMIKSSRPL RVLTAVASF FCWFPPFLV ALLGTFWLKE MLFYGKYKII DILVNPTSSL AFFNSCLNPM LYVFGQDFR ERLIHSPLTS LERALSDESA PTNDTAANSA SPPAETELOA M cgctgagatc tgtggaggtt tttctctgca aatgcagaaa gaaatcaggt ggaatgatgc A ataattatgg ccctgctcct ggtctctttg ctggcattcc tgagcttggg ctcaggatgt catcatcgga tctgtcaatg ctctaacagg gtttttctct gccaaagagag caagtgaca gagattcctt ctgacctccc gaggaatgcc atggaactga ggtttgtcct cacaagctt	Homo sapiens

122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaaggtgc attttcagga ttgggggacc tggagaaaat agagatctct  cagatgatg tcttgaggt gatagagga gatgtgtct ccaaccttc caaattacat  gaaattagaa ttgaaaagg caacaacctg ctctacatca cccctgaggc cttccagaac  cttcccaacc ttcaatatct gttaatatcc aacacaggta ttaagcacct tccagatgtt  cacaagattc attctctcca aaaggtttta ctgacattc aagataacat aacatccac  acaattgaaa gaaattcttt cgtggggctg agctttgaaa gtgtgattct atggctgaat  aagaatggga ttcaagaaat acacaactgt gcattcaatg gaacccaact agatgcagtg  aatctaagcg ttctaataaa tttagaagaa ttgctaattt ccttgccctag ctatggctta  ggaccagtca ttctagatat ttcaagaaca agatccattt ccttgccctag ctatggctta  gaaaatctta agaagctgag ggcaggtcg acttacaact taaaaaagct gcctactctg  gaaaagcttg tgcacctcat ggaagccagc ctcaactatc ccagccattg ctgtgacctt  gaaactgga gacggcaaat ctctgagctt catcaattt gcaacaaatc tattttaagg  caagaagtg attatatgac tcaggctagg ggtcagagat cctctctggc agaagacaat  gagtcagct acagcagagg atttgacatg acgtacactg agtttgacta tgacttatgc  aatgaagtgg ttgacgtgac ctgctccctt aagccagatg cattcaaccc atgtgaagat  atcatgggggt acaacatcct cagagtcctg atatggttta tcagcatcct gccatcact  gggaacatca tagtgctagt gatcctaact accagccaat ataaactcac agtcccaggg  ttccttatgt gcaacctggc cttgtctgat taatctacct gctgctcatt  gcatacattg atatccatac caagagccaa tatcaaacat atgcccattga ctggcaaat  gggcaggtct gtgatgctgc tggcttttct actgtctttg ccagtgagct gtcagtctac  actctgacag ctatcacctt ggaagatgg catacatca cgcattgcat gcagctggac  tgcaaggtgc agtcccgcca tgcgtccagt gtcattggtga tgggctggat ttttgctttt  gcagctgcc tctttcccat ctttggcatc agcaggtaca tgaaggtgag catctgctg  ccatgggata ttgacagccc ttgttcacag ctgtatgtca tgtccctcct tgtgtcaat  gtcctggcct ttgtggctat ctgtggctgc tatatccaca tctacctcac agtgcggaac  cccaacatcg tgcctcctc tagtgacacc aggatcgcca agcgcattgg catgctcatc  ttcaactgact tcccttgcat ggcacctatt tctttctttg ccatttctgc ctccctcaag  gtgcccctca tcaactgtgc caagcaaaag attctgctgg ttctgtttca cccatcaac  tcctgtgcca acccttctct ctatgcatc tttaacaaaa actttcgag agatttcttc  attctgtga gcaagtgtgg ctgctatgaa atgcaagccc aaatttatag gacagaaact  tcatccactg tccacaacac ccatccaagg aatggccact gctcttcagc tcccagagtc  accagtgggt ccaattacat acttgtcctt ctaagtcat tagcccaaaa ctaaaaacaca  atgtgaaaaat gtatctgagt attgaaatg aatcagtcct ttgctttga aggtatgtc  acaaggagct gacagtgtct ctacacattt catctaattt aatattctcg gcataccttt  aaggtaaaat ggtcagggaac tattaattcc atgtgataca ttaggaagct gaattattag  taacacaat aataattaaa gaatgcaata ctgtaaaaaa gggcgccga att  </p>	Homo sapiens
122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> MALLIVSLLA FLSLGSGCHH RICHCSNRVF LCQESKVEI PSDLP RNAIE LRFVLTKLRV P  IQKGAFSGFG DLEKIEISQN DVLEVIEWADV FSNLPKLHEI RIEKANNLLY ITPEAFQNL P  NLQYLLISNT GIKHLPDVHK IHS LQKVLLD IQDNI NIHTI ERNSFVGLSF ESVILWLNKN  GIQEIHNCAF NGQLDAVNL SDNNNLEELP NDV FHGASGP VLDISRTI HSLPSYGLN  LKLRLARSTY NLKLP TLEK LVALMEASLT YPSHCCAFAN WRQISELHP ICKNSILRQE </p>	

123	1726	G Protein- Coupled Receptor RDC1	U67784	<p>VDYMTQARGQ RSSLAEDNES SYSRGFDMTY TEFDYDLONE VDVTCSPKP DAFNPCEDIM</p> <p>GYNILRVLIW FISILAITGN IIVLVILTTS QYKLTVPREL MCNLAFAADLC IGIYLLLIAS</p> <p>VDIHTKSQYH NYAIDWQTGA GCDAAGFFTV FASELSVYTL TAITLERWHT ITHAMQLDCK</p> <p>VQLRHAASVM VMGWIFAFAA ALFPIFGISS YMKVSICLPM DIDSPLSQLY VMSLVLNLVL</p> <p>AFVVICGCIY HIYLTVRNPN IVSSSSDTRI AKRMAMLIPT DFLCMAPISE FAISASLKVP</p> <p>LITVSKAKIL LVLFPINSC ANPFLYAIFT KNFRDFEIL LSKGCGYEMQ AQIYRTETSS</p> <p>TVHNTHPRNG HCSSAPRVTS GSTYILVPLS HLAQN</p> <p>gccaactccg tgggtggtctg ggtgaatcag caggccaaga ccacaggcta tgacacgcac A</p> <p>tgctacatct tgaacctggc cattgccgac ctgtgggttg tccacaccat cccagtcctgg</p> <p>gtggtcagtc tctgtcagca caacctaggg cccatgggag agctcacgtg caaagtcaca</p> <p>cacctcatct totccatcaa cctcttcagc agcattttct tctcacgtg catgagcgtg</p> <p>gacgctacc totccatcac ctacttcacc aacaccccca gcagcaggaa gaagatggta</p> <p>cgcggtgtcg tctgcatect ggtgtggctg ctggccttct gcgtgtctct gcctgacacc</p> <p>tactacctga agacctgcac gtctgcgtcc acaaatgaga cctactgcog gtccttctac</p> <p>ccgagacaca gcatcaagga gtggtgagtc ggcattggagc tgggtctcctg tgtcttgggc</p> <p>tttgccgttc ccttctccat tatcgtctgc ttctacttcc tgctggccag agccatctcg</p> <p>gcgtccagtg accaggagaa gcacagcagc cgggaagatca tcttctccta cgtggtggtc</p> <p>ttccttgtct gctggttgcc ctaccacgtg gcgtgtctgc tggacatctt ctcctactcg</p> <p>cactacatcc ctttcacctg ccggtgggag caacccctct tcacggccct gcattgcaca</p> <p>cagtgcctgt cgctgggtgca ctgctgcgtc aacctgtcc tctacagctt catcaatcgc</p> <p>aactacaggt acgagctgat gaaggccttc atcttcaagt actcggccaa aacagggtc</p> <p>accaagctca tcatgctcctc cagagctctca gagcgggagt actctgcctt ggagcagagc</p> <p>accaaatgat ctgccctgga gaggtctctgg gaggggttta cttgtttttg aacagggtga</p> <p>tgggccctat ggttttctag agcaaaagcaa agtagctctcg ggtcttgatg cttgagtga</p> <p>gtgaagaggg gagcacgtgc cccctgcctc cattytctct tctcttgatg gacgcagctg</p> <p>tcatttggtt gtgcgtgctg acagttttgc aacaggcaga gctgtgtcgc acagcagtcg</p> <p>tgtgcgtcag agccagctga ggacaggctt gcctggactt ctgtaagata ggattttctg</p> <p>tgtttctga atttttata tgggtgatttg tattaaatt ttaagacttt atttctcac</p> <p>tattggtgta ccttataaat gtatttgaaa gttataataa ttttaaatat tgtttgggag</p> <p>gcatagtgct gacataatatt cagagtgttg tagttttaag gttagcgtga ctttcagttt</p> <p>tgactaagga tgacactaat tgttagctgt tttgaaatta tatatatata aatatataa</p> <p>tatatgccag tcttggtcga aatgttttat ttaccatagt tttatatctg tgtggtggtt</p> <p>tgtaccggca cgggatattg aacgaaaact gctttgtaat gcagtttggt acattaatag</p> <p>tattgtaaaag ttacatttta aaataaaaca aaaaactgtc tggactgcaa atctgcacac</p> <p>acaacgaaca gttgcatttc agagagtctt ctcaatttgt aagttatttt tttttaataa</p> <p>agatttttgt ttcctaaaaa aaaaaaaaaa aaaaaa</p> <p>MDLHLFDYAE PGNFSDISWP CNSSDCIIVVD TVMCNPNPK SVLLYTLSEI YIFIVIGMI P</p> <p>ANSVVVWVNI QAKTGTGDTH CYILNLAIAD LMVLTIPVW VVSLVQHNQW PMGELTCRVT</p> <p>HLIFSINLFS GIFFLTMSV DRYLSITYFT NTPSRKKMV RRVVCILVWL LAFCVSLPDT</p> <p>YYLKTVTAS NNETYCRSFY PEHSIKEWLI GMELVSVVLG FAVPFIIIV FVELLARAIS</p> <p>ASSDQEKHSS RKIIFSVMV FLVCWLPYHV AVLLDIFSIL HYIPFTCRLE HALFTALHVT</p>	Homo sapiens
124	1726	G Protein- Coupled Receptor RDC1	AAA62370.1		Homo sapiens

125	1762	Galanin Receptor GalR1	NM_001480	QCLSLVHCCV NPVLYSFNR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN AK	Homo sapiens
				atccgcgtag aatccgtcca gtctctgctc gcgcaccgtg acttctaagg ggcgcggatt A tcagccgagc tgttttcgcc tctcagttgc agcagagaag cccctggcac ccgactctat ccaccaccag gaagcctccc aaaagagctc tcgcctctgt gacgactcgg aatccctgga aaagccggga gggagtcgga ggcgcacgcc cactggggag gtggcgctgg gcgcgcggga tgccggggga gccttctctg caggagccgc acagtgcact gctgcgcgt gggcagtgcg gggaagcgc gcgggaagga gcggctccga gcaacaggtg cagcacgag cgcctccggg agccagggaa aaccgcggc gaagatcttg agcgtaagg cggagagaag ggtctttcca cctgcgcgc tgcagccgc ggatccctct tcccaggctc cgtggtcgc cagcgggcgg aggcgcgcgc gcaggggacc ccagtgtctt cgagatcacc gtccctccc gagaaggctc agctcgggc tccgaacc accctctctc agaaagtcgc ggcgcaaaga cggtgccacc aggcagggc accgatccc cgtcccgct ggctcgcgc tcgggggaag ctcagactcc taaaactgca ctctccgtg tttgcgcgg gacccttgg caccctcgc gctgctatc cgcctccc tcccgcgc cccgcgcgt cgcgggaca gcccgcggg ccatggagct ggcggtcgg aacctcagc agggcaacc gagctggcc gagcccccc ccccgagcc cgggcgcgt ttcggcatcg gcgtggagaa ctctgtcac gtggtggtg tcggcctgat cttcgcgtg ggcgtgctg gcaacagct agtgcacc gtgctggcg cagcaagcc gggcaagcc cggagcaca ccaacctgtt cactctaac ctgagcatcg ccgacctggc ctacctgtc ttctgtacc ccttcaggc caccgttac gcgtgccc cctgggtgct ggcgccctc atctgcaagt tcatccacta cttcttacc gtgtccatg tggtagact cttcacctg gcgcgatgt ccgtggacc ctactggcc atcgtgcact cgcggcctc ctcctccctc aggtgtccc gcaacgcgt gctggcggt ggctgcact gggcgctgc cattgcatg gcctgcgc tggcctacca ccaggcctc tccaccgc gcgccagcaa ccagacctc tgcgggagc agtggccga cctcgccc aagaaggcct acgtggtgtg caccttcgt tcggctacc tgcgtccgt cctgctcctc tgccttctgt atgccaagg ccttaatcac ttgcataaaa agtgaaaga catgtcaag aagctgaag catccaagaa aaagactgca cagacagttc tgggtggtgt tgtgtgtgtt ggaatctcct ggctgccga ccacatcat catctctgg ctgagtttgg agtttcccc ctgacgcgg cttccttct cttcagaatc accgccact gcctggcgta cagcaatcc tccgtgaatc ctatcattt tgcatttct tctgaaaatt tcaggaaagc ctataaaca gtgttcaagt gtcacattcg caaagattca cacctgagt atactaaaga aataaagt cgaatagaca cccaccatc aaccaattgt actcatgtgt gataaaagat agagtatcct tatggttgag ttccatata agtggaccag acacagaac aacagaatg agctagtaag cgaatgctga acttggtatc ttaacaagaa ttcaagtcgt tttaattaaa tcccagtggt gtaaaaaagt actttgatcc atttagaaa ttcttaggtc tagtgagaat tattttcaa ttttatttta gttctaaat atgtttcaga acaaaaagac aatgctgtac agttttatc ctctcagac atgaaaggga acatatatat tccatatata tgttcaact ttcataatt gtgactggc ccatcaatat ggtcaggaa atttgcagtc tacattttaa agccaattta tttagaaaa aaatttgagc tttaattctt taattttaag agaagtaata ttgtgacta tgtattttta aatatgatca tggacacaca atgatgaatt ttttggccat ttacatagac atatctatta agtggaaga	

126	1762	Galanin Receptor GalR1	NP_001471.1	aggctttctg aagtctgttt gcacaggtgg catttgcttc caattgtagc tagcgacacag agctttggaa gctgtcatt atgagataca gtcggtttac ctcaggagtc aattcagtgt tgtactggtg acctgggatg cagtagtagg cactgttgat tcaaatttat cctgtgaac tggctttata gagtttaacaa aacagagtca gagaccatg tcttaacagt ggaagatgca aataagtttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagtt ttcattttgc cttgaatgga acctactaaa aagagagatg aaaaaaatc agcgaggttg atgtagataa taattttctat gggaccaaaag actagacaga attcagtaag tcacatgaag taatggtcat gctgtatcat aaagcatatt tcatgtttga tttagatgac attcaaaaaa aatcatggga ctgaatatat ctggggtatc ctatcttgta caaatgcatg ctttttcatt aaatttgtaa tgatgtttaa tgaacatttc caccaaacat tatttctctt aaaaatgtta atttggggtt aaaacacatca ccatttgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg tttaacaatga gaaaatggca tgaataatatt aaattgtctt gtaatg ttagatgtgtg tttacaatga gaaaatggca VENFVTLVWF GLIFALGVLG NSLVITVLAR P SKPGKPRSTT NLFILNLSIA DLAYLLFCIP FOATVVALPT WVLGAFICKE IHYFTVSML VSIFTLAAMS VDRYVAIVHS RRSLSLRVSR NALLGVGCIW ALSIAMASPV AYHQGLFHRP ASNQTFCWEQ WPDPRHKAY VVCTFVFGYL LPLLLICFCY AKVLNHLHKK LKNMSKKSEA SKKTAQTQVL VVVVFGISW LPHHIIHLWA EFGVFPLTPA SELFRITAHK LAYSNSSVNP IIYAFUSENF RKAYKQVFKC HIRKDSHLSLSD TKENKSRIDT PPSTNCTHV	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcggtg gcaggggctg caggagcaag tgaccaaggag caggactggg gacaggcctg A atcgccccctg caggaaccacg acctctgcc gcctcaacga tgaactacctc tccgatacctg cagctgctgc tggcgctctc actgtgcggg cgtgtaccag cgctgggaac ggtagccgag ggagtgccag aagggggcaga cggcggggga gctgtaccag ggcctgcctt ggcctgcctt gtaacgggtc cttcgatatg gagaccttg cagcgcgga accgccttca ggcctgcctt ggcactgccc gtgcgtcctg cccctggtac tacgttgtct gggactatgc tgcacccaat ggcactgccc gtgcgtcctg cccctggtac ctgcctggc accaccatgt ggctgcaggt ttgctcctcc gccagtgtgg cagtgtatggc caatggggac ttggagaga ccatacaca ttgtagaacc cagagaagaa tgaggccttt ctggaccaaa ggtcatctt ggagcgggtg caggteatgt aactgtcgg ctactccctg tctctcgcca cactgtgtgt agcctgtctc atctgtgtt tgttcaggcg gctacattgc actagaaact atatccacat caacctgttc acgtcttcca tgcgtcgagc tgcggccatt ctcagccgag acctctgtct acctgacct ggcctctacc ttggggacca ggccttgctg ctgtggaacc aggcctctgc tgcctgcgc acggccacga tgcgtaccca gtactgcgtg ggtgccaaact acactggct gctggtggag ggcgtctacc tgcacagtct cctggtgctc gtgggaggct ccgaggaggg ccacttcgc tactacctgc tctcggctg gggggccccc gcgcttttcg tcattccctg ggtgatectc aggtacctgt acgagaacac gcagtgtgg gagcgcaacg aagtcaggc catttggtgg attatacga ccccatcct catgaccatc ttgattaatt tctcatctt tatccgcat ctggcattc tctgttccaa gctgaggaca cggcaaatgc cctgcccggga ttaccggctg aggtggtctc gtccacgct gacgtgggtg ccccgtctgg gtgtccacga ggtggtgttt gctcccgtag cagaggaaca ggcctggggc gccctgcgtc tgcgaagct cggcttttag atcttctca gctccttcca gggcttctc gtcagcgtcc tctactgtct catcaacaag gaggtgcagt cggagatccg ccgtggctgg caccactgcc gctgtgcgcg cagcctgggc gagaggaac ccagctctcc ggagcgcgc	Homo sapiens



128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p> tgcctccgg ctccggcccg ggcgaggtcc ccaccagccg cggcttgctcc  tccagggcc tccagggcc tgggaatgag gccagccggg agttggaaag ttactgctag  gggcccggat ccccggtctt gttcagttag catggattta ttgagtcca actgcgtgccc  agggccagta cggaggacgc tggggaatg gtgaaggaaa cagaaaaaag gtccctgccc  ttctggagat gacaaactgag tggggaaaac agaccgtgaa cacaaaaacat caagtccac  acagctatg gaatggttat gaagggaagc gagaaggggg cctagggtgg tctgggaggg  gtctccaaag aggtgacact taagccatcc cgaagaagag tgaagagat cactttgggg  agagctggag aacaggattc taggcggaag cgatagcata ggcaaaaggcc cttggcgagg  aaggcgctca gccttggtcg gagtagaatt aagtacagac caacagggtg gggagagaca  gagaagtgg caggggcacc caagttggga ttctattca ggtgcattgg agattcttag  gagtgctct tgggggtaat atttatttt ttaaaaaatg aggat </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> ccagattcta aatatcaggaa agacgctgt gggaaaaatg caggccaaaaa gttcttagta A  aactgcagcc agggagacac agactagaat agactagtaga agactatgag cagagtgggt  ttaattctaa gcccttttgt ggctaagttt ggtgtgtgtt aacttatgta atttagatt  gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaatagt gacagagagt  tttgaatacc atagttagta tataatgact cagagtattt ttattaaaga aggcaaaagag  ccggcatag atcttatctt catcttcact cggttgcaaa atcaatagtt aaaaaatagc  atctaaggga acttttaggt gggaaaaaaa atctagagat ggctctaaat gactgtttcc  ttctgaactt ggaggtggac catttcacg actgcaacat ctccagtcac agtgcggatc  tcccgtgaa cgatgactgg tcccaccgg ggtatcctcta tgtcatccct gcagtttatg  gggttatcat tctgataggc ctcatggga acatcacttt gatcaagatc ttctgtacag  tcaagtccat gcgaaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc  tcctcctaata aacgtgtgct ccagtggtatg ccagcaggta cctggctgac agatggctat  ttggcaggat tggctgcaaa ctgatccct ttatacagct tacctctgtt ggggtgtctg  tcttcacact cagggcgctc tcggcagaca gatacaagc cattgtccgg ccaatggata  tccaggcctc ccatgcccctg atgaagatct gctcaaaagc cgcctttatc tggatcatct  ccatgctgct ggcattcca gaggcgctgt ttctgacct ccatcccttc catgagaaa  gcaccaacca gaccttcatt agctgtgccc cataccaca ctctaattgag ctccaccca  aaatccattc tatggcttc ttctgtgtct tctacgtcat cccactgtcg atcatctctg  tttactacta ctctattgct aaaaatctga tccagagatgc ttacaattct cccgtggaag  ggaatatata tgtcaagaag cagatgaaat cccggaagcg acttgccaag acagtgtggtg  tgtttgtggg cctgttcgcc ttctgtggc tcccaataca tgtcatctac ctgtaccgct  cctaccacta ctctgaggtg gacacatcca tgtctccactt tgtcaccagc atctgtgccc </p>	Homo sapiens

130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p>gctctctggc cttcaccaac tctgctgta accctttgc cctctacctg ctgagcaaga  gtttcaggaa acagttcaac actcagctgc tctgttgcca gctggcctg atcatcegg  ctcacagcac tggaggaggt acaacctgca tgacctcctt caagagtacc aacctctcg  tggccacctt tagcctcatc aatggaaaca tctgtcaca gcggtatgtc tagattgacc  cttgattttg cccctgagg gacggttttg ctttatggct agacaggaac ccttgcatcc  attgttgtgt ctgtgccctc caaagagcct tcagatgtct cctgagtgtg gtagggtggg  gtggggaggc ccaaatgatg gataccatt atattttgaa agaagc  MALNDCLLN LEVDHEMHCN ISSHADLPV NDDWHPGIL YVTPAVYGV ILLIGNIT P  LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDASR YLADRWLFGR IGCKLIPFIQ  LTSVGVSVFT LTALSADRYK AIVRPMDIQA SHALMKICLK AAFIWIISML LAIPEAVFSD  LHPFHEESTN QFISCAPYP HSNELHPKIH SMASFLVFV IPLSIISVY YFIAKNLIQS  AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMHL  FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQNTQLLCC QGLIIRSHS TGRSTTCMTS  LKSTNPSVAT FSLINGNICH ERYV</p>	Homo sapiens
131	1814	Cholecystoki nin B Receptor	NM_000731	<p>atggagctgc tcaagctgaa ccggagcgtg cagggaaaccg gacccgggcc gggggcttcc A  ctgtgcgcgc cggggggcgc tctctcaac agcagcagtg tgggcaacct cagctgcgag  ccccctcgca ttcgcgagc cgggacaga gaattggagc tgccattag aatcactctt  tacgcagtga tcttctgat gacgttggga ggaatatgc tcatcatgt ggtctcggga  ctgagccgcc gctgaggac tgtcaccat gcttctctcc tctcactggc agtcagcgac  ctctgctgg cgtggcttg catgcccctc acctctctc ccaatctcat gggcacattc  atctttggca cegtcatctg caagcgggtt tctactctca tgggggtgtc tgtgagtgtg  tccacgctaa gctcgtggc catcgactg gacggtaca gcgccatctg ccgaccactg  caggcaagag tgtggcagac gcgtctccac gcggctcgcg tgattgtagc cacgtggctg  ctgtccggac tactcatgtt gccctacccc gtgtacactg tctgtcaacc agtggggcct  cgtgtctgc agtgcgtgca tgcgtggccc agtgcggcgg tccgccagac ctggctcgta  ctgctgttc tgccttgtt cttcatccc ggtgtgtta tggccgtggc ctacgggctt  atctctcgcg agctctactt agggcttcgc tttagcggcg acagtgcag cgacagccaa  agcagggtcc gaaaccaag cgggctgcca ggggctgttc accagaacgg gcgttgccgg  cctgagactg gcgcggttg cgaagacagc gatgctgtct acgtgcaact tccacgttcc  cggcctgccc tggagctgac ggcgtgacg gctccaggcg cgggatcccg cccccggccc  acccaggcca agctgctggc taagaagcgc gtggtgcgaa tgtgtgtgt gatcgttgtg  cttttttttc tgtgttgtt gccagtttat agtgccaaca cgtggcgcgc ctttgatggc  ccgggtgcac accgagcact ctgggtgtct cctatctct tcatctactt gctgagctac  gcctcggcct gtgtcaaccc cctgggtctac tgcctcatgc accgtcgtt tgcggaggcc  tgcttgaaaa ctgtgcctgc ctgctgccc cggcctccac gactcgcgc cagggtctt  cccgatgagg acctccccc tccctccatt gcttctgtgt ccaggcttag ctacaccac  atcagcacac tggggccctgg ctgaggagta gaggggcctt gggggttgag gcagggcaaa  tgacatgcac tgaccttcc agacataga aacacaaacc acaactgaca caggaaacca  acacccaaa catggactaa ccccaacgac aggaagaggt agcttacctg acacaagag  aataagaatg gacagtaga tgggaaagga ggcagcctc tgatatggga ctgagcctgg  cccatagaaa catgacactg accttgaga gacacagcgt ccctagcagt gaactattc</p>	Homo sapiens

[illegible]



136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	<p>aatacacaaa acaagttaac ctttgatctt tcacattaag tatctcaggg aaaaaatttg acatacgtct aaacctgtga cgtttccatc taaagaaggc agaaataaaa catggacttt agattcggtt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaaatat ggcaaacagt gcctctcctg aacagaatca aaatcactgt tcagccatca acaacagcat ccactgatg cagggaacc tcccactct gacctgtct gaaaagatcc gagtgcggt tactttctc cttttctgc tctctgcgac ctttaatgct tctttctgt tgaacttca gaagtggaca cagaagaaag agaaagggaa aaagctctca agaataagc tgctcttaaa acatctgacc ttagccaacc tgttgagagc tctgattgtc atgccactgg atgggatgg gaacattaca ttccaatggt atgctggaga gttactctgc aaattctca gttatctaaa gctttctcc atgtatgcc cagccttcat gatggtggg atcagcctgg accgtccct ggctatcacg aggccctag ctttgaagc caacagcaaa gtcggacagt ccatgggttg cctggcctgg atcctcagta gtgtcttgc aggaccacag ttatacatc tcaggatgat tcatctagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgcag tttttcaca tgggtgcac aagcatttta taacttttc acctcagct gcctcttcat catcctctt ttcatcagc tgatctgcaa tgcaaaaaatc atcttcccc tgacacgggt ccttcacag gacccacag aactacaact gaatcagtc aagaacaata taccaagagc acggctgaag actctaaaaa tgacggtgc atttgccact tcattactg ttgtctggac tccctactat gtctaggaa ttggtattg gtttgatcct gaaatgttaa acaggtgtgc agaccagta aatcacttct tctttctct tgccttttta aacctgct ttgatccact tatctatgga tattttctc tgtga</p> <p>MANASPEQN QNHCSAINNS IPLMQNLPT LTLSGKIRVT VTFFLFLLSA TFNASFLKL P QKWTQKKEG KKLRLMKLL KHLTLANLLE TLIIVPLDGM WNITVQWYAG ELLCKVLISYL KLFSMYAPAF MMVISLDRS LAITRPLALK SNKVGQSMV GLAWILSSVF AGPOLYIFRM IHLADSSGQT KVFSQCVTHC SFSQWHQAF YNFTFSCLF IIPLFIMLIC NAKIIFLTR VLHQDPHELQ LNQSKNIPR ARLKTLKMTV AFATSETVCW TPLYVLGIWY WFDPEMLNRL SDPVNHHFFL FAFLNPCFDP LIYGPFSL</p>	Homo sapiens
137	1945	Opsin, green-sensitive NM_000513	<p>atggcccagc agtgagcct ccaaggctc gcaggccgac atccgcagga cagctatgag A gacagcacc agtcagcat cttcacctac accaacagca actccaccag aggcccttc gaaggcccg attaccacat cgctcccaga tgggtgtacc acctcaccag tgtctggtg atctttgtg tcatgtcatc cgttttaca aatgggcttg tgctggcgcc caccatgaag ttcaagaagc tgcgccacc gctgaactgg atcctggtga acctggcggt cgtgacctg gcagagaccg tcatcgccag cactatcagc gttgtgaacc aggtctatgg ctactctgtg ctgggccacc ctatgtgtgt cctggagggc tacaccgtct cctgtgtgg gatcacaggt ctctggtctc tggccatcat ttctgggag agatggatgg tggctgcaa gccctttggc aatgtgagat ttgatgcaa gctggccatc gtgggcattg ccttctctg gatctggct gctgtgtgga cagccccgc catctttggt tggagcaggt actggcccc cgccctgaag acttcatgcg gccagacgt gttcagggc agctcgtacc ccggggtgca gctttacatg attgtctca tggtaacctg ctgcatcacc ccaatcaga tcatcgtgct ctgtacctc caagtgtggc tggccatccg agcgttgga aagcagcaga aagagtctga atccaccag aaggcagaga aggaagtgc gcgcattggt gtggtgattg tcttggaatt ctgtcttgc tggggaccat acgcttctt cgcagtctt gctgctgcca acctggcta cccctccac</p>	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	<p>cctttgatgg ctgcccctgcc ggcttctttt gcaaaaagtg ccactatcta caaccocgtt  atctatgtct ttatgaaccg gcagtttcga aactgcactc tgcagctttt cgggaagaag  gttgacgatg gctctgaact ctccagcgcc tccaaaacgg aggtctcatc tgtgtcctcg  gtatcgctcg catga</p> <p>MAQWLSLQRL AGRHPQDSYE DSTQSIITY TNSNSTRGPF EGPNYHIAPR WVYHLSVWM P  IFVVIASVFT NGLVLAATMK FKLRHPLNW ILVNLAVADL AETVIASITIS VVNQVYGYFV  LGHPMCVLEG YTVSLCGITG LWSLAIISWE RMWVCKPFG NVRFDAKLAI VGIAFSWIWA  AVWTAPPIFG WSRYPWHGILK TSCGPDVFSG SSYPGVQSYM IVLMTCCIT PLSIIVLCYL  QVWLAIKRAVA KQKSESTQ KAEKEVTRMV VMVLAFCFC WGPYAFFACF AAANPGYPFH  PLMAALPAFF AKSATIYNPV IYFEMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS  VSPA</p>	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	<p>atgtggaacg cgacgcccag cgaagagccg ggggtcaacc tcacactggc cgactggac A  tgggatgctt cccccggcaa cgactcgctg ggcgacgagc tgcageagct cttccccgcg  cgcgtgctgg cgggcgctcac agccaactgc gtggcactct tcgtggtggg tatcgctggc  aacctgtcca ccatgctggt ggtgtcgcg ctcgcgagc tgcgcaccac caccacactc  taactgtcca gcatggcctt ctegatctg ctcactctcc tctgcatgcc cctggacctc  gttcgctctt ggcagtaccg gccctggaac ttccgagacc tcctctgcaa actcttccaa  ttcgtcagt agagtgcac ctacgccacg gtgctacca tcacagcgt gagcgtcgag  cgctacttgc ccatctgctt cccactccgg gccaaagtg tggcaccaa gggcggggtg  aagctggtea tcttcgtcat ctgggccctg gcccttctga gcgcggggcc catctcctg  ctagtccggg tggagcaaga gaacggacc gaccttggg acaccaacga gtgcgcggcc  accgagtttg cgggtcgctc tggactgctc acggtcatgg tgtgggtgtc cagcatcttc  ttcttccttc ctgtctcttg tctcacggtc cttacagtc tcacggcag gaagctgtgg  cggagaggcg cggcgcatgc tgctgtgggt gccctcgtea gggaccagaa ccacaagcaa  accgtgaaa tgctgggtgg gtctcagcgc ggcctcagc tttctctcgc gggctcctatc  ctctccctgt gccctctccc ttctctctga</p> <p>MWNATPSEEP GFNLTLADLD WDASPGNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P  NLLTMLVVR FRELRTTNL YLSSNAFSDL LIFLCMPDL VRLWQYRPWN FGDLLCKLFQ  FVSECTYAT VLTITALSVE RYFAICFPLR AKVWTKGRV KLVI FWTWAV AFCSAGPIFV  LVGVEHENG DPWDTECRP TEFAVRSGLL TMMWVSSIF FFLPVFCITV LYSLIGRKLW  RRRGDAVVG ASLRDQNHKQ TVKMLGGSQR ALRLSLAGPI LSLCLLP SL</p>	Homo sapiens
140	1951	Growth Hormone Secretagogue Receptor	NP_004113.1	<p>agcagccaa gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A  cggatgtgg gggcccaagt cttctgcgtg ttgagcccg taccgacctg attgggccac  atgcacccag aatgtgactt catcacccag ctgagagagg atgagatgc ctgtctacaa  gcagcagagg agatgccccaa caccacccctg ggctgcccctg cgacctggga tgggctgctg  tgctggccaa cggcaggtc tggcgagtg gtcacccctc cctgcgccga tttctctct  cacttcagct cagagtccagg ggctgtgaaa cgggattgta ctactactgg ctggtctgag  ccctttccac cttaccctgt ggctgcccct gtgcctctgg agctgctggc tgaggaggaa  tcttacttct ccacagtga gattatctac accgtgggcc atagatctc tatgtagcc  ctcttcgtgg ccatcaccat cctggttgc ctcaggaggc tccactggcc ccggaactac  gtccacaccc agctgttcac cactttatc ctcaaggcgg gacgtgtgtt cctgaaggat</p>	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	<p>agcagccaa gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A  cggatgtgg gggcccaagt cttctgcgtg ttgagcccg taccgacctg attgggccac  atgcacccag aatgtgactt catcacccag ctgagagagg atgagatgc ctgtctacaa  gcagcagagg agatgccccaa caccacccctg ggctgcccctg cgacctggga tgggctgctg  tgctggccaa cggcaggtc tggcgagtg gtcacccctc cctgcgccga tttctctct  cacttcagct cagagtccagg ggctgtgaaa cgggattgta ctactactgg ctggtctgag  ccctttccac cttaccctgt ggctgcccct gtgcctctgg agctgctggc tgaggaggaa  tcttacttct ccacagtga gattatctac accgtgggcc atagatctc tatgtagcc  ctcttcgtgg ccatcaccat cctggttgc ctcaggaggc tccactggcc ccggaactac  gtccacaccc agctgttcac cactttatc ctcaaggcgg gacgtgtgtt cctgaaggat</p>	Homo sapiens

142	1954	Growth Hormone-Releasing Hormone Receptor	NP_000814.1	<p> ggggctctag cccaaggctc agaggagcca ataaacctgt aaatgaaaaa aaaaaa  GLLWPTAGS GCVLSPPLTV LGHMHPCDF ITQREDESA CLOAAEEMPN TTLGCPATWD P  EESYFSTVK IYYTVGHSIS IVALFVAITI LVALRLLHCP RNYVHTQLFT TFIKAGRVF  LKDAALFHS DTDHCSFSTV LCKVSVAAASH FATMNFWSL LAEAVYLNCL LASTSPSSRR  AFWMLVLGW GLPVLFTGTW VSKLAFEDI ACWDLDDTSP YMWLIKGPV LSVGVNFGLF  LNIIRILVRK LEPAQGLSHT QSQYWRLSKS TLFILPLFGI HYIIFNPLPD NAGLGIRLPL  ELGLSFQFG IVAILYCFLN QEVRTETSRK WHGHDPPELLP AWRTAKWTT PSRSAAKVLIT  SMC </p>	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	<p> caggagagaca tacaggattt aagaagccca tcattggagaa gaccttcaat tacagagata A  aaaagtittt cttgtggaac agttaacac tagatggcag ataacagact gaggagtggag  ctgcttctga ctcgattaaa agggagatga gccataactg gcggtgctc tttcgccaat  gagctctccc aattcctct cctctttaga agacaagatg tgtgaggga acaagaccac  tatggccagc cccagctga tgccctggtt ggtggtcctg agcactatct gcttggctac  agtagggtc aacctgctg tgctgtatgc cgtacggagt gaggcggaagc tccacactgt  ggggaacctg tacatcgtca gcctctcggt ggggacttg atcgtgggtg ccgtcgtcat  gcctatgaac atcctctacc tgctcatgtc caagtggta cttggccgtc ctctctgctt  cttttggtt tccatggact atgtggccag cacagcgtcc attttcagt tcttctctt  gtgcattgat cgtaccgct ctgtccagca gccctcagg taccttaagt atcgtaacaa  gaccagagcc tggccacca ttctgggggc ctggtttctc tctttctgt gggttattcc  cattctagc tggaaatcact tcatcagca gacctcggtg gcgcgagag acaagtgtga  gacagacttc tatgatgtca cctgggtcaa ggtcatgact gccatcata acttctacct  gcccaccttg ctcatgctct ggttctatgc caagatctac aaggccgtac gacaacactg  ccagcaccgg gagtcatca ataggctct ccttctctc tcagaaaita agctgaggcc  agagaacccc aagggggatg ccaagaaccc aggggaaggag tctccttggg aggttctgaa </p>	Homo sapiens

aaggaaagcca aaagatgctg glggtggatc tgtcttgaag tcaccatccc aaacccccaa  
ggagatgaaa tcccagttg tcttcagcca agagatgat agagaagtag acaaaactcta  
ctgctttcca cttgatattg tgcacatgca ggtcgggca gaggggagta gcagggacta  
tgtagccgtc aaccggagcc atggccagct caagacagat gagcagggcc tgaacacaca  
tggggccagc gagatatcag aggatcagat aggcacacc aggcacaggc agccaatcct tctctgaac  
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153/448

144	2120	Histamine H1 NP_000852.1 Receptor	MSLPNSSCLL EDKMCENKT TMASPOLMPL VGNLYIVSLV VADLIVGAV MPNNILYLLM LCIDRYRSVQ QPLRYLKYRT KTRASATILG ETDFYDVTFW KVMTAIINFY LPTLLMLWFY PENPKGDACK PKESPWEVL KRKPKDAGGG YCFPLDIVHM QAAEGSSRD YVAVNRSHGQ TDSDTTETA PGKGLRSGS NTGLDYIKFT MAAFILCWIP YFIFFMVIAF CKNCCNEHLH RILHRS	VVVLSTICLV TVGLNLLVLY AVRSERKILHT P SKWSLGRPLC LFWLSMDYVA STASIFSVEI AWFLSFLWVI PILGWNHFMQ QTSVRREDKC AKIYKAVRQH CQHRELINRS LPSFSEIKLR SVLKSPSQTP KEMKSPVVS QEDDREVDKL LKTDQGLNT HGASEISEDQ MLGDSQSFSR WKRLRSHSRQ YVSGLHMNRE RKAAKQLGFI MFTIWLGYIN STLNPLIYPL CNEFNKTKFK	Homo sapiens
145	2121	Histamine H2 NM_022304 Receptor	ctctcgccct ccactgactc cagagagggga tgggagcagg caccagctat ggagagggat atgacaccaa agccaccgcc agacagtgcc gacctacccc agccccggga ggaagctagc tgatccatga acctggcttc gaggccctgc caacacctta gaagggtgttg ctttaattat gaagcccttc ccacccccctg gcaaaaaaaa tctgttggga gcttgagtc cagtgtgttg gaaccacagg gccctgatca ggggactgag acagcctctt ccttttgctt ggactctacc goggtcctca tctcatcac cgttgctggc aacgcgcggc tccgcaacct gaccaattgt ctctcggcc tctgtgtgct gccctctctt tttggcaagg tcttctgcaa tatctacacc attcttaacc tcttcatgat cagcctcgac tacctgtgc tggtaacccc agttcgggtc tccattaccc tgtcctttct gtctatccac aaggggcaatc ataccacctc taagtgcmaa gatgggctgg tcaccttcta cctcccgcta ttcaagggtcg cccgggatca ggccaagagg accatcaggg agcacaaaag cacagtgaca tgtcggtttc cctacttcac cgcgtttgtg aatgaggtgt tagaagccat cgttctgtgg atcctgtatg ctgcgctgaa cagagacttc	gatcccccagt actgactcc atcacgaga A acagctgcgt ctccacatga cccactctgc tcggattcta tgcaaaacct ggaagcgga tcttcaggg accgtctgag gactgagtt tttctctct tcttcattca tattcattcc tctagaaaa gcagcccaga gtcagtcaat aaaaaaaaa aaaactggac acattttgga catagttgtc acattgggag cagagaagaa cctagagtc ccaggatggc acccaatggc gcattgctcg tctgtctggc cgtgggcttg tctatcgtgt ccttggctat cactgacctg gccatctacc agtgccttg caagtggagc agcctggatg tgatgctctg cacagcctcc cggtaactgg ctgtcatgga cccactgcgg gccatctctc tggctttaat ttgggtctac ctgggggtgga acagcaggaa cgagaccagc gtccaggtea atgaagtga cgggctgggtg ctgatcatgt gcataccta ctaccgcatc ttagtctctg gaaggcagcc tcatgggggc cttcatcatc tgagagggga tgatgcacatc ccaactcagc cctgaacccc cgacccgggt accaacagct cttctgtctg	Homo sapiens

146	2121	Histamine H2 Receptor	NP_071640.1	aggctggcca accgcaact ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc aggacccaaa gcgagaaacc caggcaacag gaagagaaac cctgaagct ccaggtgtgg agtggacag aagtcacggc cccccaggga gccacagaca ggtaatagcc ctgaccttg gtcacagga tgggggcaat gggagggaat gctactgatg ggaatgatta agggagtgc tgtttaggtg gtgctggttt atgttctagg aactcttcac gagcactttg taaacacct cttgettaat cctcccaacg gcccccaag gtagaactta gctccctttt aaaaggagca cattaatatt ctacagaggc ttggcaagg cgcacagct ggggcat MAPNGTASSF CLDSTACKIT ITVGLAVLIL ITVAGNVVC LAVGLNRRRL NLNCFIVSL P AITDLLGLL VLPFSAIYQL SKWISFGKVF CNIYSLDVM LNATILNLF MISLDRYCAV MDPLRPVLV TPVRVAISLV LIWVISITLS FLSIHGWS RNESKGNHT TSKCKVQVNE VYGLVDGLVT FYLPLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAM GAFIICWEPY FTAIFYRGLR GDDAINEVLE AIVLWLYAN SALNPILYAA LNRDERTGYQ QLFCCRLANR NSHTSLRSN ASQLSRTQSR EPRQEEKPL KIQWMSGTEV TAPQGATDR tgcagcactc acctggaat ccccgattca gatctccgc gggagcctg gccctacctg A cgccccgagc gctgcctgc ccccccaacg cagcgctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgcagctg gagcccgccg acatctcccc ggccatccc gtcacatca cggcgggtcta ctccgtagt ttgctgtgg gcttgggtgg caactcgctg gtcagtctc tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctgctt tggcagatgc tttagtact caacccatgc cctttcacag tacggctctac ttgatgaatt cctggcctt tggggagtgt ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcaccttg acctgatga gctggagccg ctacattgcc gtgtgccacc ccgtgaaggc ttgggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct ggctgctgc gtcactgtt ggcactctctg caatagtcc tggaggcacc aaagtcaggg aagacgtcga tgcattgag tgcctcttg agttcccaga tgatgactac tctgtgtgg acctcttcac gaagatctgc gtcttcact ttgctctctg gatccctgtc ctcatcatca tgcgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgctctg ctggactccc attcacatat ccatctggt ggaggtctg gggagcacct cccacagcac agtgcctctc tcagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tcccattctc tagcctttc ttgatgaaaa cttcaagcgg tgttccggg acttctgctt tccactgaag atgaggatgg agcggcagag cactagcaga gtcgaaaata cagttcagga tctgcttac ctgagggaca tcatggggat gaataaacca gtagactag tctgtgagat gtctctgac ag MESPIQIFRG EPGTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVF VVGLVGNLSV MFIIRYTKM KTATNIYFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFLT MMSVDRYIAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDYS WMDLFMKICV FIFAFVIPVL IIIVCYTIMI LRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFYCIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTRV RNTVQDPAYL RDIDGMKPV ggccgccccat gaagcagcgg tcttcggcgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	tgcagcactc acctggaat ccccgattca gatctccgc gggagcctg gccctacctg A cgccccgagc gctgcctgc ccccccaacg cagcgctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgcagctg gagcccgccg acatctcccc ggccatccc gtcacatca cggcgggtcta ctccgtagt ttgctgtgg gcttgggtgg caactcgctg gtcagtctc tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctgctt tggcagatgc tttagtact caacccatgc cctttcacag tacggctctac ttgatgaatt cctggcctt tggggagtgt ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcaccttg acctgatga gctggagccg ctacattgcc gtgtgccacc ccgtgaaggc ttgggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct ggctgctgc gtcactgtt ggcactctctg caatagtcc tggaggcacc aaagtcaggg aagacgtcga tgcattgag tgcctcttg agttcccaga tgatgactac tctgtgtgg acctcttcac gaagatctgc gtcttcact ttgctctctg gatccctgtc ctcatcatca tgcgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgctctg ctggactccc attcacatat ccatctggt ggaggtctg gggagcacct cccacagcac agtgcctctc tcagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tcccattctc tagcctttc ttgatgaaaa cttcaagcgg tgttccggg acttctgctt tccactgaag atgaggatgg agcggcagag cactagcaga gtcgaaaata cagttcagga tctgcttac ctgagggaca tcatggggat gaataaacca gtagactag tctgtgagat gtctctgac ag IITAVYSVF VVGLVGNLSV MFIIRYTKM KTATNIYFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFLT MMSVDRYIAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDYS WMDLFMKICV FIFAFVIPVL IIIVCYTIMI LRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFYCIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTRV RNTVQDPAYL RDIDGMKPV ggccgccccat gaagcagcgg tcttcggcgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
148	2783	Opioid Receptor, kappa 1 (OPRK1)	NP_000903.1	tgcagcactc acctggaat ccccgattca gatctccgc gggagcctg gccctacctg A cgccccgagc gctgcctgc ccccccaacg cagcgctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgcagctg gagcccgccg acatctcccc ggccatccc gtcacatca cggcgggtcta ctccgtagt ttgctgtgg gcttgggtgg caactcgctg gtcagtctc tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctgctt tggcagatgc tttagtact caacccatgc cctttcacag tacggctctac ttgatgaatt cctggcctt tggggagtgt ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcaccttg acctgatga gctggagccg ctacattgcc gtgtgccacc ccgtgaaggc ttgggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct ggctgctgc gtcactgtt ggcactctctg caatagtcc tggaggcacc aaagtcaggg aagacgtcga tgcattgag tgcctcttg agttcccaga tgatgactac tctgtgtgg acctcttcac gaagatctgc gtcttcact ttgctctctg gatccctgtc ctcatcatca tgcgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgctctg ctggactccc attcacatat ccatctggt ggaggtctg gggagcacct cccacagcac agtgcctctc tcagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tcccattctc tagcctttc ttgatgaaaa cttcaagcgg tgttccggg acttctgctt tccactgaag atgaggatgg agcggcagag cactagcaga gtcgaaaata cagttcagga tctgcttac ctgagggaca tcatggggat gaataaacca gtagactag tctgtgagat gtctctgac ag MESPIQIFRG EPGTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVF VVGLVGNLSV MFIIRYTKM KTATNIYFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFLT MMSVDRYIAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDYS WMDLFMKICV FIFAFVIPVL IIIVCYTIMI LRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFYCIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTRV RNTVQDPAYL RDIDGMKPV ggccgccccat gaagcagcgg tcttcggcgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
149	2964	Luteinizing	NM_000233	aggctggcca accgcaact ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc aggacccaaa gcgagaaacc caggcaacag gaagagaaac cctgaagct ccaggtgtgg agtggacag aagtcacggc cccccaggga gccacagaca ggtaatagcc ctgaccttg gtcacagga tgggggcaat gggagggaat gctactgatg ggaatgatta agggagtgc tgtttaggtg gtgctggttt atgttctagg aactcttcac gagcactttg taaacacct cttgettaat cctcccaacg gcccccaag gtagaactta gctccctttt aaaaggagca cattaatatt ctacagaggc ttggcaagg cgcacagct ggggcat MAPNGTASSF CLDSTACKIT ITVGLAVLIL ITVAGNVVC LAVGLNRRRL NLNCFIVSL P AITDLLGLL VLPFSAIYQL SKWISFGKVF CNIYSLDVM LNATILNLF MISLDRYCAV MDPLRPVLV TPVRVAISLV LIWVISITLS FLSIHGWS RNESKGNHT TSKCKVQVNE VYGLVDGLVT FYLPLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAM GAFIICWEPY FTAIFYRGLR GDDAINEVLE AIVLWLYAN SALNPILYAA LNRDERTGYQ QLFCCRLANR NSHTSLRSN ASQLSRTQSR EPRQEEKPL KIQWMSGTEV TAPQGATDR tgcagcactc acctggaat ccccgattca gatctccgc gggagcctg gccctacctg A cgccccgagc gctgcctgc ccccccaacg cagcgctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgcagctg gagcccgccg acatctcccc ggccatccc gtcacatca cggcgggtcta ctccgtagt ttgctgtgg gcttgggtgg caactcgctg gtcagtctc tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctgctt tggcagatgc tttagtact caacccatgc cctttcacag tacggctctac ttgatgaatt cctggcctt tggggagtgt ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcaccttg acctgatga gctggagccg ctacattgcc gtgtgccacc ccgtgaaggc ttgggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct ggctgctgc gtcactgtt ggcactctctg caatagtcc tggaggcacc aaagtcaggg aagacgtcga tgcattgag tgcctcttg agttcccaga tgatgactac tctgtgtgg acctcttcac gaagatctgc gtcttcact ttgctctctg gatccctgtc ctcatcatca tgcgtctgcta caccctgatg atcctgcgtc tcaagagcgt ccggctcctt tctggctccc gagagaaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tctgctctg ctggactccc attcacatat ccatctggt ggaggtctg gggagcacct cccacagcac agtgcctctc tcagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tcccattctc tagcctttc ttgatgaaaa cttcaagcgg tgttccggg acttctgctt tccactgaag atgaggatgg agcggcagag cactagcaga gtcgaaaata cagttcagga tctgcttac ctgagggaca tcatggggat gaataaacca gtagactag tctgtgagat gtctctgac ag MESPIQIFRG EPGTCAPSA CLPPNSSAWF PGWAEPSNG SAGSEDAQLE PAHISPAIPV P IITAVYSVF VVGLVGNLSV MFIIRYTKM KTATNIYFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFLT MMSVDRYIAV CHPVKALDFR TPLKAKIINI CIWLLSSVG ISAILVGGTK VREDVDVIEC SLQFPDDYS WMDLFMKICV FIFAFVIPVL IIIVCYTIMI LRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFYCIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTRV RNTVQDPAYL RDIDGMKPV ggccgccccat gaagcagcgg tcttcggcgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens

sapiens

Hormone/Chor  
iogonadotrop  
in Receptor

agccgcgcgt gccagagagc ctgcgcgagc cgctctgccc tgagccctgc aactgcgtgc  
 ccgacggcgc cctgcgtgc ccgggcccc cggcgggtct cactcgacta tcacttgccct  
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 tgactgttct ttttgttctc ctgacaagtc gttacaactc tccagtgcct cgtttctca  
 tgtgcaatct ctccttttga gacttttga tgggctctca tctgtgctc atagcctcag  
 ttgattccca aaccaaggcc cagtactata accatgccat agactggcag acagggagt  
 ggtgcagcac tgcgtggctt ttcactgtat tgcgaagtga actttctgc tacacctca  
 ccgtcatcac tctagaaaga tggcacacca tccctatgc tattcacctg gacaaaagc  
 tgcgattaag acatgccatt ctgattatgc ttggaggatg gctcttttct tctctaattg  
 ctatgttgc cctgtcgggt gtcagcaatt acatgaaggt cagtatttgc tccccatgg  
 atgtggaac cactctctca caagtctata tattaacct cctgatttct aatgtgtgg  
 ccttctctcat aattgtgct tgcataatta aaatttatt tgcagtctga aaccagaat  
 taatggctac caataaagat acaaagattg ctaagaaat ggcaatcctc atcttcccg  
 atttccactg catggcacct atctctttt ttgccatctc agtgccttc aaagtacctc  
 ttatcacagt aaccaactct aaagttttac tggttctttt ttatcccatc aattcttctg  
 ccaatccatt tctgtatgca atattcacta agacattcca aagagatttc tttcttttgc  
 tgagcaaat tggctgctgt aaacgtcggg ctgaacttta tagaaggaaa gatttttcag  
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 ttttgatat ctttttttca ttttctgtat ttgtattgca tctataaaa atattagttc  
 ataacagatc aqaattttaa ataaggggc ttttctctca ggtagtttga aaacacact

150	2964	Luteinizing Hormone/Chor iogonadotrop in Receptor	NP_000224.1	<p>           ctagagatgc actgttcaat tcggtacgca ctaggcacat gtggctaaat taaaattaaa            taaaatgaga aatgtagttt ctacagtgca ctacgtttca agttctcaat ggctacgtca            agttctcaat ggctacgtgt gactagtgct taccatactg gacagcacag acacagaata            tttcatcac cacagaaagt tctatctgtt ctattataga gacttttatg tatgcctat            ctgatttcta ctattatata attaaggta aacatctgaa agcacatttc agcctatttg            cttagtgaaa cattaagctg tagactgtaa actctctgtg agtaggaacc ctgtctcaat            gcattttgtt ttctctcttc ctacctcaag atcttggtgaa tggtagacata caaatgtgct            gagtagaat tactctgaag ttatgaaca tataatgaaa acaatttttc cgcc            MKQFSAALQL LKLLLLLOPP LPRALREALC PEPNCVDPDG ALRCPGPTAG LTRLSLAYLP P            VKVIPSQAFR GLNEVIKIEI SQIDSLERIE ANAFDNLNL SEILIQNTKN LRYIEPGAFI            NLPGLKYL SI CNTGIRKFPD VTKVFSESN FILEICDNLH ITTIPGNAFQ GMNESVTLK            LYNGFEFEEVQ SHAFNGTILT SLELKENVHL EKMHGAFRG ATGPKTLDIS STKLQALPSY            GLESIQRLIA TSSYSLKKLP SRETFVNLE ATLTPSHCC AFRNLPTKEQ NFSHSISENF            SKQCESTVRK VSNKTLYSSM LAESELGWD YEYGFCLPKT PRCAPEPDAF NPCEDIMGYD            FLRVLIWLIN ILAIMGNMTV LFVLLTSRYK LTVPRFLMCN LSFADFCMGL YLLLIASVDS            QTKGQYINHA IDWQTGSGCS TAGFTVFAS ELSVYTLTVI TLERWHTITY AIHLDQKLRL            RHAILIMLGG WLFSSLIAML PLVGSVNYMK VSICFPMDVE TTLSQVYIIT ILILNVVAFF            IICACYIKIY FAVRNPELMA TNKDKIAKK MAILIFLDTF CMAPISFFAI SAAFKVPLIT            VTNSKVLVLV FYPINSCANP FLYAIFTKTF QRDFFLLLSK FGCKRRRAEL YRRKDFSAIT            SNKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC         </p>	Homo sapiens
151	2976	Lysophosphat idic Acid Receptor Edg2	NM_001401	<p>           acggcgcgt gggctcaac tgctccgcgc cggacgggct ttgtggttgg gggcggcgtg A            gcgagtcca gtgagagtgt gggctgcgcg tgtgggcgcg ggcgcgggtg ggtggcgcgtg            cgttcttgcg agccggcctg caggaggcga ggtccctctg gctcccgca cccagcggcg            gaccgagccc ctggaggga gttgcgcgag cgcgcgggcg cgcgcggcct cctgtcccg            gccaggta ca gcttcttc tagcatgact tgcatacacc tacaaccaca gagctgtcat ggcgtccatc            ctccgtagt tctggggcgt gttcaccacc ttcacagccc cagttcacag ccatgaatga accacagtgc            tctacttcca tccctgtaat ttctctttat aaccgaagt gaaagcatct tgcacagaa            tggaaacacag tcagcaagct ggtgatggga ctgggaatca ctggttctat ttccatcatg            ttggccaacc tattggtcat ggtggcaatc tatgtcaacc gccgcttcca tttctctatt            tattacctaa tggctaactt ggtgctgca gacttctttg ctgggttggc ctacttctat            ctcatgttca acacaggacc caatactcg agactgactg ttacacatg gctcctgcgt            cagggcctca ttgacaccag cctgacggca tctgtggcca acttactggc tattgcaatc            gagaggcaca ttacgggttt ccgcagtgcg ctccacacac ggaatgagcaa ccgggggga            gtgggtggtca ttgtggtcat ctggactatg gccatcgta tgggtgctat acccagtgtg            ggtggaact gtatctgtga tattgaaaat tgttccaaca tggcaccct ctacagtgc            tctacttag tcttctgggc cattttcaac ttggtgacct ttgtggtaat ggtggttctc            tatgctcaca tctttggcta tgttcgccag aggaactatga gaatgctcgc gcatgttct            ggaaccccgcc ggaatcgga taccatgatg agtcttctga agactgtggt cattgtgctt            ggggcccctta tcatctgctg gactctgga ttggttttgt tacttctaga cgtgtgctgt            ccacagtgcg acgtgctggc ctatgagaaa ttcttctctc tcttctgta attcaactct         </p>	Homo sapiens

152	2976	Lysophosphat NP_001392.1 idic Acid Receptor Edg2	gcatgaacc coactatta ctctacgc gacaagaaa tgagcgccac cttaggcag atcctctgct gccagcgag tgagaacccc accggcccca cagaagctc agaccgtcg gcttctccc tcaaacacac catcttggtc ggagttcaca gcaatgacca ctctgtggtt tagaagcgaa actgagatga ggaaccagcc gtctctctt ggaggataaa cagcctcccc ctaccacaat gccagggcaa ggtggggtgt gagagggag aaaagtcaac tcatgtactt aaacactaac caatgacagt attgttctt ggacccaca agacttgata tataatgaaa attagcttat gtgacaaccc tcatcttgat cccatccct tctgaaagta ggaagtggga gctcttgcaa tggaaattcaa gaacagactc tggagtgctc atttagacta cactaactag acttttaaaa gattttgtgt ggtttgtgc agtcagaaat aaattctggc tagttgaatc cacaacttca ttatatata gcttccctt ttttatttt aaaggatacgt tttcacttaa taaacacgtt tatgcctatc agcatgtttg tgatggatga gactatggac tgctttaaa ctaccataat tccattttt ccttacata ggaactgt aagttggaat tatctttgt ttagaaagca tgcagttaat gtatgtatgc agtatgcctt acttaaaaag attaaagga tactaatgtt aaatcttcta ggaatatgaa cctgacttc aaagccagta ttgttttagg tcatgaagca aacaatgctc taatcacaat attaactgtt taattaaaat gttgtaacaa gtataaaaaa ggaatgttaa gtttattacc aaagtgatgt gtattccaaa aaagtcatag aagatgaagc actataatat tgtcccata tattaaaat acccaagtac attctaatta ccagtatac agaggaatat tttcgtagtc tttgtaaaat aatatactca tcatagaaaa cttgaaaaat gagaaatgt ataaaaagc aaaaatgatt actgataata tcacaaccca gaagtaacca cctttaaaaa gcaaccccca tgtatgccta tatgtgtatt gtatactttt tttacataat tggagtcata ctgtaaacag ttttataagt agatctttt cattgcaaaa ttgccacatt tctttatggc attaaaaatt ttacaaaaac ataatttttaa tggctatatt atattccatt taatggatgc aactcagttt atttaacat tccatgttg ttaactattt aggtgtttc taattttcat tattataaag ttgagaaaat ttggtgt IFIMLANLLV MVAIYNRRF HFPIIYLMAN LAAADFFAGL AYFYLMNTG PNTRRLTVST WLLRQGLIDT STASVANLL AIAIERHITV FRMLHTRMS NRRVWVIV IWTMAIVMGA IPSVGNWCIC DIENCSNMAP LYSDSYLVFW AIFNLVTFV MVLYAHIFG YVRQTRMS RHSGPRNR DTMSSLKTV VIVLGAFTIC WTPGLVLLL DVCCPQCDVL AYEKFFLLA EFNSAMNPPII YSYRDKEMSA TFRQILCCQR SENFTGPTES SDRSASSLNH TILAGVHSND HSV	Homo sapiens
153	3038	G Protein- Coupled Receptor MRG	ttttgtattt gttgcacct aagtctgttc atttcttct cctcagctga catttgagc A atagcagtcg atgatgccc cacagacact gcctgagact cagccccctg gagaaacyca gatttctcta ttttccaggt caagtcctgc cagccataga aaggacttct ttggtgccaa ctgtgtgtga atgcctgctt tggaaatctc agtgcctctc tgcactgtc tgagccagg gaaatgccat actgtggcac tgcctgatcc tgcagtccta ccaaggatg cccaggactg gtttgaaaga gatgagacat gccaggtgc gtggtcacg ctgttaatcc agcactttg gaggtcaagg cagtggatca caaggtcaga gttgagacca gccaggccaa tatggtgaaa accccatctc tactaaaaat acaaaaaatt agccgggcaa tgggtgtggg tgcctgtagt tccagctagt caggaggccg aggcaggaga atcgtttgaa cctggaaggt ggaggttcca gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgagac tccaaactcaa	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaaagaga tgagacacta gtgtctcatg agtagaacct ggaccagaca  caaatctcca ttcccaatgt ttagtgctc attagtgccc aacaaacaga tattgggtct  atgtgggtag gcctggggca tctgtacaa caggagatgt gtaggggag ggagaacaga  tcacaaattc atggagagct atttcagag cagatactcc catccactct gatattgtagt  taatgttcag ctgttcctaa aaagcacacc caacaatggg tgttctattc cagcctagga  aaatgtagag gcaaggggtc tgaggccaga ggacaccact agatggacca ctgtcctga  ctgtgatgt gtggccact caggtccag cccccatgg tctgggggaa aatttgctgg  ttcagccaga gggtggatg jacagtgtt gctgagtcac agatatctct ccatgttagc  ctttgtctcc acagtgtga ccaggaggca cagaacccaa acctggtatc tcagctctgt  gggtctttc ttcaaaatga gacgaatgaa accatacata tgcagatgag catggcagtg  ggacagcagg cctgcccctt gaatacatt gccccaagg ctgtgctggt ctcctctgt  gggtctttat tgaatggcac tgtctctggt ctgctttgct gtggggccac gaatccctac  atggtataca tctccacct ggctgctgct gctaaattat catggagtcg tgttttttat cctgatttc  gggttcttac aggtgactct gtaacttat catggagtcg tgttttttat cctgatttc  ctggccatat tgtctccctt ctcctttgag gtgtgctct gtctcctggt ggccatcagc  acagagcgt gtgtgtgtgt cctctccccc atctggtaca gatgccacog cccaaatac  acatctaag ttgtctgac cctcatctgg ggctgctt tttgcatcaa catagtaaaa  tcacttttc taacttactg gaaacatgta aggcactgtg tcataattct aagctttct  gggtcttcc atgctactct ttcaattgtg atgtgtgtg cgagtctgac tctactcatt  agattcctgt gctgctccca gcagcaaaa gcacaccagg tctatgcgt gtgacagatc  tcggccccc tgttctact ctgggcccata cctctattt attcctgtg tggcaccct cataacagat  ttcaaaatgt ttgtcaccc cctctattt attcctgtg tctcattat aaacagcagc  gccaacccta tcaattattt cttgtgggg agcctcagaa agaaaaggct gaaggaaatct  ctcagagtga ttctccaaag ggcttagca gataagccag aggtggggag gaacaaaaag  gcagctggca tcgacccaat ggagcaacca cactctact agcatgtgga gaacctctt  cccagggagc acagggtcga ttgtggaaca taatttccc catctgagct ggggaattgt  acacataga accagcctg ttctgcatca taaggctgct gcatcaaatc aatgctttat  tctaataag ttcagcttcc atggacttcc aaacaaacc cttgctgttt gtggttgga  gagacattaa cttccttct aggcagtaag ccagtttga atgtgtcca gtccaacga  tgaggggaat gggaccagt gagacttcc tggtaacctgt ggaatccaaa taaagaccat  acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> atgagcatcc aaaagaagta tctggaggga gatttgtct tctctgtgag cagcagcagc A  ttctacgga cctgtctgga gcccagctc ggatcagccc ttctgacagc aatgaatgct  tcgtgctgcc tgcctctgt tcagccaaca ctgcctaag gctcggagca cctccaaagcc </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	<p> ccttttttca gcaaccagag cagcagcgcc ttctgtgagc aggtcttcat caagccccgag  atcttctgt ctctgggcat cgtcagttctg ctggaataa tcttggttat cctggccgtg  gtcaggaaacg gcaacctgca ctccccgatg tactttttc tctgcagcct ggcggtggcc  gacatgctgg taagtgtgtc caatgcccgt gagaccatca tgatcgccat cgtccacagc  gactacctga ccttcgagga ccagtttatc cagccatgag acaacatctt cgactccatg  atctgcatct ccttggtggc ctccatctgc aactctctgg ccctgcctg cgacaggtac  gtcaccatct tttacgcgct ccgtaccac agcatcatga cgtgaggaa ggcctcacc  ttgatcgagg ccatctgggt ctgctgggc gtctgtggc tgggtttcat cgtctactcg  gagagcaaaa tggatattgt gtgcctcat accatgttct tggccatgat cgtcctcatg  ggcaccctct acgtgcacat gtctctctt gcgcggctgc agtcaagcg catagcagca  ctgccacctg ccgacggggt ggccccacag caacatcat gcatgaagg ggcagtcacc  atcacattc tcttgggcgt gtctatcttc tcttgggccc ccttcttctt ccacctggtc  ctcatcatca cctgccccac caacctctac tgcattctgt acactgccc cttcaaaccc  tacctggtcc tcatcatgtg caactcgtc atcgaccac tcatctacgc tticcggagc  ctgggaattgc gcaacacct tagggagatt ctctgtggct gcaacggcat gaacttggga  tag </p>	Homo sapiens
157	3058	Melanocortin NM_005912 4 Receptor (MC4R)	<p> MSIQKYLEG DFVFPVSSS FLRTLLERQL GSALLTAMNA SCCLPSVQPT LPNGSEHLQA P  PFFSQSSSA FCEQVFIKPE IFLSIGIVSL LENILVILAV VRNGNLSPM YFFLCSLAVA  DMLVSNAL ETIMIAIVHS DYLTFEDQFI QHMDNIFDSM ICISLVASIC NLLAIADVRY  VTIFYALRYH SIMTVRKALT LIVAIWCCG VCGVVFIVYS ESKMIVICLI TMFFAMMLLM  GTLVYHMFLE ARLHVKRIAA LPPADGVAPO QHSCMKGAVT ITILLGVFIF CWAPFFLLHV  LIITCPTNPY CICYTAHENT YLVLMNSV IDPLIYAFRS LELRNTFREI LCGCNGMNLG  atggtgaact ccaaccacgc tgggatgcac acttctctgc accctggaa ccgcagcagt A  tacagactgc acagcaatgc cagtgagtcc cttgaaaaag gctactctga tggagggtgc  tacgagcaac tttttgtctc tcttgagggtg tttgtgactc tgggtgtcat cagcttgggtg  gagatatct tagtgattgt ggcaatagcc aagacaaga atctgcattc accatgtac  ttttcatct gcagcttggc tgtgctgtat atgtgtgga gcgtttcaa tggatcagaa  accattatca tcacctatt aaacagtaca gatacggatg cacagagttt cacagtgaat  attgataatg tcaattgactc ggtgatctgt agtctctgc ttgcattcat ttgcagcctg  ctttcaattg cagtgagacg gtactttact atcttctatg ctctccagta ccataacatt  atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcttg cacggtttca  ggcattttgt tcatcattta ctcatagatg agtctgtgca tcatctgct catcaccatg  ttcttcacca tgttggtctc catggttctt ccttatgtcc acatgttctt gatggccagg  cttcacatta agaggattgc tgtctctccc ggcactgggtg ccatacgcca aggtgccaat  atgaaggagg cgattacatt gaccatctgt attgcgctct ttgtgtctg ctgggccccca  ttcttctctc acttaattt ctacatctct tgtctctcaga atccatattg tgtgtgcttc  atgtctcact ttaactgtga tctcactgtg atcatgtga attcaatcat cgtatcctgt  atttatgcac tccggagtca agaactaggg aaaaacctca aagagatcat ctgttgcctat  cccttgggag gcctttgtga cttgtctagc agatattaa </p>	Homo sapiens
158	3058	Melanocortin NP_005903.1 4 Receptor	<p> MVNTHRGMH TSLHLNRRS YRLHNSAVES LGKGYSDGGC YEQLFVSPEV FVTLGVISLL P  ENILVIVAIA KNKNLHSPMY FFICSLAVAD MLVSVSNGSE TIIITLLNST DTDAQSFTVN </p>	Homo sapiens

(MC4R)			IDNVDSVIC SLLASICSL LSIADVRYFT IFYALQYHNI MTVKRVGIII SCIWAACTVS GILFIYSDS SAVIICLITM FFTMLALMAS LYVEMFLMAR LHIKRIAVLP GTGAIRQGAN MKGAITLTIL IGVFWVCWAP FFLHLIFYIS CPQNPYCVCF MSHENLYLIL IMCNSIIDPL IYALRSQELR KTFKEIICCY PLGGLCDLSS RY atgaattcct catttcacct gcattttctg gatctcaacc tgaatgccac agaggccaac A ctttcaggac ccaatgtcaa aacaagtct tcaccatgtg aagacatggg cattgctgtg gagtggtttc tcaactcggg tgtcatcagc ctcttgaga acatcttggg cataggggcc atagtgaaga aaaaaacct gcactcccc atgtacttct tcgtgtgcag cctggcagtg gcgacatgc tggtagagcat gtccagtgc ttggagacca tcaccatcta cctactcaac aacaagcacc tagtgatagc agacgcttt ttgggccaca ttgacaatgt gtttgactcc atgatctgca ttccgtggt ggcattccatg tgcagcttac tggccattgc agtggatagg tacgtacca tcttctacgc cctgcgtac caccacatca tgacggcgag gcgtcaggg gccatcatcg cgggcatctg ggctttctgc acgggctgcy gcattgtctt catcctgtac tcagaatcca cctacgtcat cctgtgcctc atctccatgt tcttcgtat gctgttctc ctggtgtctc tgtacataca catgttctc ctggcgcgga ctcacgtcaa gcgcatcgcg gctctgccg gggccagctc tgcggcgag aggaccagca tgcagggcg ggtcacgctc accatgctgc tggcggtgtt taccgtgtgc tggggccctg tcttcttca tctcactta atgctttctt gccctcagaa cctctactgc tctcgttca tgtctcactt caatatgtac ctcactactca tcatgtgtaa ttcgtgatg gacctctca tatatgctt ccgcagccaa gagatgcgga agacctttaa ggagattatt tgcgtccgtg gtttcaggat cgcctgcagc tttccagaa gggattaa			Homo sapiens
159	3059	Melanocortin NM_005913 5 Receptor (MC5R)	IVKNLHSP MYFFVCSLAV ADMLVMSA WETTYILLN NKHLVIADAF VRHIDNVFDS MICISWASM CSLLAIADVR YVTIFYALRY HHIMTARRSG AIIAGIWAFC TGGGIVFILI SESTYVILCL ISMFFAMLFL LVSLYIHMFL LARTHVKRIA ALPGASSARQ RTSMQGAATV TMLLGVFTVC WAPFFLHLTL MLSCPQNLVC SRFMSHFMY LILIMNSVM DPLIYAFRSQ EMRKFKEII CCRGFRIACS FPRRD ggagagggtg tgagggcaga tctgggggtg cccagatgga aggaggcag catgggggac A accaaggcc ccttggcagc accatgaact aagcaggaca cctggagggy aagaactgtg gggacctgga ggcctccaac gactccttc tgcctcctg acaggactat ggctgtgcag ggatccaga gaagacttct ggcctcctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc tctcagcc tggggctggt gagcttggtg gagaacgcgc tgggtgtggc caccatcgcc aagaaccgga acctgcact accatgtac tgcctcatc gctgcctggc cttgtcggac ctgtggtga gcgggagcaa cgtgctggag acggccgtca tctcctgct ggaggccggt gcactgggtg cccgggctgc ggtgctgcag cagctggaca atgtcattga cgtgateacc tgcagctcca tgcgtgccag cctctgctc ctggcgcca tgcctgtgga ccgtacatc tccatcttct acgcactgc ctaccacagc atcgtgacc tgcgggggc gcggcaagcc gttcgggcca tctgggtggc cagtgtcgtc ttacgacgc tcttcacgc ctactacgac cagtgggcg tctgtgtg cctcgtgtc ttctcctg ctatgctgt gctcattggc gtgctgtacg tccacatgct ggcccgggc tgccagcacg cccagggcat cggccgctc			Homo sapiens
160	3059	Melanocortin NP_005904.1 5 Receptor (MC5R)	IVKNLHSP MYFFVCSLAV ADMLVMSA WETTYILLN NKHLVIADAF VRHIDNVFDS MICISWASM CSLLAIADVR YVTIFYALRY HHIMTARRSG AIIAGIWAFC TGGGIVFILI SESTYVILCL ISMFFAMLFL LVSLYIHMFL LARTHVKRIA ALPGASSARQ RTSMQGAATV TMLLGVFTVC WAPFFLHLTL MLSCPQNLVC SRFMSHFMY LILIMNSVM DPLIYAFRSQ EMRKFKEII CCRGFRIACS FPRRD ggagagggtg tgagggcaga tctgggggtg cccagatgga aggaggcag catgggggac A accaaggcc ccttggcagc accatgaact aagcaggaca cctggagggy aagaactgtg gggacctgga ggcctccaac gactccttc tgcctcctg acaggactat ggctgtgcag ggatccaga gaagacttct ggcctcctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc tctcagcc tggggctggt gagcttggtg gagaacgcgc tgggtgtggc caccatcgcc aagaaccgga acctgcact accatgtac tgcctcatc gctgcctggc cttgtcggac ctgtggtga gcgggagcaa cgtgctggag acggccgtca tctcctgct ggaggccggt gcactgggtg cccgggctgc ggtgctgcag cagctggaca atgtcattga cgtgateacc tgcagctcca tgcgtgccag cctctgctc ctggcgcca tgcctgtgga ccgtacatc tccatcttct acgcactgc ctaccacagc atcgtgacc tgcgggggc gcggcaagcc gttcgggcca tctgggtggc cagtgtcgtc ttacgacgc tcttcacgc ctactacgac cagtgggcg tctgtgtg cctcgtgtc ttctcctg ctatgctgt gctcattggc gtgctgtacg tccacatgct ggcccgggc tgccagcacg cccagggcat cggccgctc			Homo sapiens
161	3061	Melanocortin NM_002386 1 Receptor (MC1R)	ggagagggtg tgagggcaga tctgggggtg cccagatgga aggaggcag catgggggac A accaaggcc ccttggcagc accatgaact aagcaggaca cctggagggy aagaactgtg gggacctgga ggcctccaac gactccttc tgcctcctg acaggactat ggctgtgcag ggatccaga gaagacttct ggcctcctc aactccacc ccacagccat cccccagctg gggtggctg ccaaccagac aggagcccg tgcctggagg tgcctatctc tgacgggctc tctcagcc tggggctggt gagcttggtg gagaacgcgc tgggtgtggc caccatcgcc aagaaccgga acctgcact accatgtac tgcctcatc gctgcctggc cttgtcggac ctgtggtga gcgggagcaa cgtgctggag acggccgtca tctcctgct ggaggccggt gcactgggtg cccgggctgc ggtgctgcag cagctggaca atgtcattga cgtgateacc tgcagctcca tgcgtgccag cctctgctc ctggcgcca tgcctgtgga ccgtacatc tccatcttct acgcactgc ctaccacagc atcgtgacc tgcgggggc gcggcaagcc gttcgggcca tctgggtggc cagtgtcgtc ttacgacgc tcttcacgc ctactacgac cagtgggcg tctgtgtg cctcgtgtc ttctcctg ctatgctgt gctcattggc gtgctgtacg tccacatgct ggcccgggc tgccagcacg cccagggcat cggccgctc			Homo sapiens



162	3061	Melanocortin 1 Receptor (MCLR)	NP_002377.2	MAVQGSQRRL	IGSLNSTPTA	IPQLGLAANQ	TGARCLEVSI	SDGLFLSLGL	VSLVENALW	P	Homo sapiens
				ATIAKNRLH	SPMYCFICCL	ALSDLIVSGS	NVLETAVILL	LEAGALVARA	AVLQQLDNVI		
				DVITCSSMLS	SLCFLGAIAV	DRYISIFYAL	RHSIVTLPR	ARQAVAAIWV	ASVVFSTLFI		
				AYYDHVAVLL	CLVFFFLAML	VLMVLYVHM	LARACQHAQG	IARLHKRQRP	VHQFGGLKGA		
				VTLTILLGIF	FLCWGPFPLH	LTLIVLCPEH	PTCGCIFKNE	NLFLALIION	AIIDPLIYAF		
				HSQELRRTLK	EVLTCWS						
163	3079	Melatonin Receptor type 1a	NM_005958		cgggcggagc	cttaacaagt	ggtcggggcg	gcggacgagg	cgggcgatgg	ccctggggcc	A
					gggacgcgaa	cagggaacat	gcagggcaac	ggcagcgcgc	tgcccaacgc	ctcccagccc	
					gtgctccgcg	gggacggcgc	gcggccctcg	tggtggcggt	cgccctagc	ctgcgtctc	
					atcttcacca	tcgtggtgga	cactctgggc	aacctctgg	tcctctgtc	gggtatctgg	
					aacaagaagc	tcaggaaagc	aggaacatc	tttgtggtga	gcttagcggt	ggcagacctg	
					gtggtggcca	tttatccgta	ccggttggtg	gtgatgtcga	tatttaacaa	cggtgtggaac	
					ctgggtctatc	tgcaactgcca	agtcagtggg	ttctgtatg	gcctgagcgt	catcggtctc	
					atattcaaca	tcaccgggat	cgccatcaac	cgctactgct	acatctgcca	cagctcctcaag	
					tacgacaaac	tgtacagcag	caagaactcc	ctctgtctacg	tgctcctcat	atggctctcg	
					acgttggcgg	ccgtcctgcc	caacctccgt	gcagggaactc	tccagtaaga	cccagagatc	
					tactcgtgca	ccttcgcccc	gtccgtcagc	tcgcctaca	ccatgcgcgt	gggtggtttc	
					cacttcctcg	tcccatgat	catagtcatc	ttctgttacc	tgagaatatg	gatccgtggt	
					ctccaggtca	gacagagggt	gaaacctgac	cgaacaccca	aactgaaacc	acaggacttc	
					aggaattttg	tcaccatggt	tgtggttttt	gtctctttg	ccatttctg	ggctcctctg	
					aacttcattg	gcctggccgt	ggcctctgac	cccgccagca	tggtgcctag	gatcccagag	
					tggtgtttg	tggccagtta	ctacatggcg	tatttcaaca	gtgcctcaa	tgccattata	
					tacgggctac	tgaacccaaa	tttcagggaag	gaatacagga	gaattatagt	ctcgcctctg	
					acagccaggg	tgttctttgt	ggacagctct	aagcagctgg	ccgatagggt	taaatggaaa	
					ccgtctccac	tgatgaccaa	caataatgta	gtaaggttg	actccgttta	aaaaagcacc	
					acgttccggg	tgagatggac	acgttcgca	aggtctcgct	cttgacagat	gtctgggaaa	
					gcagagtggg	ggaggaaact	tccaaacttt	acctggctgc	tgccatagtt	tctgagctaa	
					cgtgctgtca	gcattataaa	ccccccaat	ctactagtca	agagaagtac	agaatgtatg	
					gagagttaca	tgtaactga	ggaaatgcggt	tcagggtctgg	ggtgagagta	agctgctgaa	
					tgcatccagg	ggaaggagtg	tgcaaacitt	tattgtaaat	gagtgccaca	aaagggttaa	
					ttgcattctt	cttcactttt	tgaagacttc	tagcagaaaa	atgaaagaga	attttatta	
					taaatgagca	aatggaaaca	tttttttct	gtaaatggaa	caaacatga	aagtgggggtg	
					agtgcctctt	attacagagg	gaaaggctga	acataaatca	gttaatggct	catcaacaat	

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p> cacaaccaca accaacacacca caaacctttc agctggcaga gttagcattg ggtagctata  ctcatgggtca taaatgtttg cgcctctata ttacaagtgg tgcattgcaac cagataaaga  actaaatcat aggcggggca cagtcgctca cacctgtaat ctacgacctt tgggaggctg  aggtagggcag atcaactgag ttcaaggagt ttgagaccac ctggggcaac atgatgaaat  cccatctcta aaaaaatata aaaaattatc tgggcatggt gcacacgcct gtaatcccag  ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtggtgag  ccgagatcgc gccagtacat tcaacttag gctacagaat gagactctgc ccaaaaaaa  aaaaaaaa </p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p> ASQPVLRGDG ARPSWLASAL ACVLIFTIV DIILNLLVIL SVYRNKKLRN P  AGNIFVVSILA VADLVVAIYP YPLVLMISFN NGWNLGYLHC QVSGFLMGLS VIGSIFNITG  IAINRYCYIC HSLKYDKLYS SKNSLCYVLL IWLTLAVAL PNLRACTLOQ DPRIYSC TFA  QSVSSAYTIA VVWFHFLVPM IIVIFCYLRI WILVLQVRQR VKPDRPKLK PQDFRNFVTM  FVVFVLEAIC WAPLNFIGLA VASDPASMVP RIPEWLFVAS YIMAYFNSCL NAIYGLLNQ  NFKKEYRRII VSICTARVFF VDSNDVADR VKWKPSPLMT NNNVVKVDSV </p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttgttaacta caagggcctc aggtggggca ggtgcagagg gc</p> <p>VLSVLNRK LRNAGNLFV SLALDLVA FYFPLILVA IFYDGNALGE EHCKASAFVM</p> <p>GLSVIGSVFN ITAIAINRYC YICHSMAYHR IYRRWHTPLH ICLIWLLTW ALLPNFFVGS</p> <p>LEYDPRIYSC TFIQTASTQY TAAVVVIHFL LPIAWSFY LRIWLVLQA RRAKAPESRL</p> <p>CLKPSDLRSF LTMFVVFIF AICWAPLNCI GLAVAINPOE MAPOIPEGLF VTSYLLAYFN</p> <p>SCLNIAIVYGL LNQNFREYK RILLALWNP RCIQDASKGS HAEGLOSPAP PIIGVQHQAQ</p> <p>AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgtgatcc tgagcctgct gggagatctt aacgatcccc A</p> <p>aggagcaaca tggggccccc cctagcggtt cccacccct atggtgtgtat tggctgtaag</p> <p>ctaccccagc cagaataccc accggctcta atcatcttta tgtctgctg gatggttatc</p> <p>accatcggtg tagacctaat cggcaactcc atggtcattt tggctgtgac gaagaacaag</p> <p>aagctccgga attctggcaa catctctgtg gtcagtctct ctgtggccga tatgtggtg</p> <p>gccatctacc catacccttt gatctgcat gccatgtcca ttgggggctg ggaatgagc</p> <p>cagttacagt gccagatggt cgggttcac acagggtga gtgtggtgg ctcacatctc</p> <p>aacatcggtg caatcgctat caaccggtac tgetacatct gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtgcgcaa tacctgcatc tacctggtea tcacctggat catgaccgtc</p> <p>ctggctgtcc tgcacaacat gtacattggc accatcgagt acgacctctg caccataccc</p> <p>tgcattcttca actactgtga caacctgtc ttcactgtta ccactgtctg catccacttc</p> <p>gtctccctc tcctcatggt gggttctgc taagttagga tctggacca agtgctggcg</p> <p>gccgtgacc ctgcaggga gaatcctgac aaccaacttg ctgaggttct caattttcta</p> <p>accatgttg tgatcttct cctcttgca gtgtgctgt gccctatac cgtgtcact</p> <p>gtcttggtg ctgtcagtc gaaggagatg gaaggcaaga tcccaactg gcttatctt</p> <p>gcagcctact tcatagccta ctcaacagc tgcctcaacg ctgtgatcta cgggtcctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatgcgga ccctataca</p> <p>ttcttccctg gcctcatcag tgatattcgt gagatgcagg aggccgtac cctggcccg</p> <p>gccgtgccc atgctcgca ccaagctcgt gaacaagacc gtgcccagc ctgtcctgct</p> <p>gtggaggaaa ccccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagtggc</p> <p>caccccgacc gtgctcttgg ccacctaaag cccatttcca gatcctctc tgcctatcgc</p> <p>aaatctgct ctacccacca caagtctgtc tttagccact ccaaggctg ctctggtcac</p> <p>ctcaagcctg tctctggcca ctccaagcct gccctggtc acccaagtc tgcactgtc</p> <p>tacctaaag ctgcctctgt ccatttcaag ggtgactctg tccatttcaa ggggtgactct</p> <p>gtccatttca agcctgactc tgttcatctc aagcctgctt ccagcaacc caagcccatc</p> <p>actggccacc atgtctctgc tggagccac tccaaagtctg ccttcagtgc tgcacacagc</p> <p>cacctaaac ccatcaagcc agctaccagc catgctgagc ccaccactgc tgactatccc</p> <p>aagcctgcca ctaccagcca ccctaagccc gctgctgctg acaaccctga gctctctgcc</p> <p>tccattgccc ccgagatccc tgccattgcc caccctggt ctgacgacag tgacctcct</p> <p>gagtcggcct ctagccctgc cgctgggccc accaagcctg ctgcccagca gctggagtct</p> <p>gacacctgc ctgaccttcc tgacctact gtatgacta ccagtaccaa tgattacat</p> <p>gatgtcgtg ttgttgatgt tgaagatgat cctgatgaaa tggctgtgtg aaaaatgctc</p> <p>tcgtaggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP YGCIGCKLPQ PEYPPALIIF MFCAMVITIV VDLIGNSMVI LAVTRNKKLR P NSGNIFWVSL SVADMLVAIY PYPMLHAMS IGVWDLSQLQ QOMVGFTIGL SVVGSIFNIV AJAINRYCYI CHSLQYERIF SVRNTCIYLV ITWIMTVLAV LPNMYIGITIE YDPRTYTCIF NYLNNPVFTV TIVCIHFVLP LLIVGFCYVR IWKVLAARD PAGQNPNDQL AEVRNFLTME VIFLLEAVCW CPINVLTVLV AVSPKEMAGK IPNWLYLAAY FIAYFNSCLN AVIYGLINEN FRREYWTIFH AMRHPIIFFP GLSIDIREMQ EARTLARARA HARDQAREQD RAHACPAVEE TPMNVNRNVL PGDAAAGHPD RASGHPKPHS RSSASAYRKS STHHKSVEFSH SKAASGHLKP VSGHSPASG HPKSATVYPK PASVHFKGDS VHFPGDSVHF KPDSVHFKPA SSNPKPITGH HVSAGSHSKS AFSAAATSHPK PIKPATSHAE PTTADYKPKA TTSHPKPAAA DNPELSASHC PEIPALAHV SDDSDLPESA SSPAAGPTKP AASQLESMTI ADLPDPTVVT TSTNDYHDVW VVDVEDDPDE MAV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acaaacgcct ccagcttgta gaggcggctg tggaggagccc agaggaggag A acgaaggga agaggcgggt ggtgaggag gcaaaaggct tggacagcca ttgttgcgga ggggcaccac tccgggagag ggcgcgctgg gcgtcttggg ggtgcgcgc gggagcctgc agcgggacca gcgtgggaac ggcgtggga ggcgtggac ctgcctctca ccaccatggt cgggctcctt ttgtttttt tccagcgat ctttttggag gtgtcccttc tcccagaag ccccggcagg aaagtgttcg tggcaggagc gtctctcag cgctcgtgg ccagaatgga cggagatgc atcattggag cctcttctc agtccatcac cagcctccgg ccgagaaagt gcccagagg aagtgtggg agatcaggga gcagtatggc atccagagg tggaggccat gtccacacg ttggataaga tcaacgcgga cccggctctc ctgcccaca tcacctggg cagtgcagc cgggactcct gctggcactc ttcctggct ctggaacaga gcattgagtt cattaggac tctctgatt ccattcgaga tgagaaggat gggatcaacc ggtgtctgcc tgacggccag tccctcccc caggcaggac taagaagccc attgcggag tgatcgggtcc cggctccagc tctgtagcca ttcaagtga gaacctgctc cagctcttcg acatcccca gatcgcttat tcagccacaa gcctgcacct gactgacaaa actttgtaca aatactcct gagggttgct ccttctgaca cttgcaggc agggccatg cttgacatag tcaaacgtta caattggacc tatgtctctg cagtcacac cctctgtatc gccattctg acaaatcta cgctttcaaa gagctggctg cccaggaaag cctctgacc actcttgcg aaactccgag agaggcttc cagcaacgct ggggagaaga gcttgaccg aggcattgga aggcattgga tccatgagcgc caaggctaga gtgggtggtc gcttctgtga aggcattgga ggcattgga gatgggcga catgcggcgc cttggcgtcg tggcggagtt ctcactcatt ggaagtgatg gatgggcga cagagatgaa gtcatgaaag gttatgaggt ggaagccaac gggggaatca cgataaagct gcagtctca gaggtcaggt catttgatga ttatttctg aaactgagggc tggacactaa cacagggaat ccttggttcc ctgagttctg gcaacatcgg ttcagtgcc gccctccagg acaccttctg gaaaatccca actttaacg aatctgcaca ggcaatgaaa gcttagaaga aaactatgct caggacagta agatggggtt tgtcatcaat gccatctatg ccatggcaca tgggctgcag aacatgcacc atgcctctg ccttgcccac gtggcctct gcgatgccat gaagccatc gacggcagca agctgctgga cttctctc agtctctcat tcatggaggt atctggagag gagggtggtt ttgatgagaa aggagacgct cctggaaggt atgatcatc gaatctgcag tacactgaag ctaatcgcta tgactatgtg cagttggaa cctggcatga aggagtgcgt aacattgatg attacaaaat ccagatgaac aagagtggag tggtcgggtc	Homo sapiens

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 taaatattt ctattatt

Glutamate Receptor 1		sapiens
KVPERKCGEI	REQYGIQVRE	AMFHTLDKIN
EFIRDSLISI	RDEKDGINRC	LPDGQSLPPG
PQIAYSATSI	DLSDKTLKY	FLRVVPSDTL
MDAFKELAAQ	EGLCIAHSDK	IYSNAGEKSF
SAMRRLGUVG	EFSLIGSDGW	ADRDEVIEGY
TNTRNPWPE	FWQHRFQCRL	PGHLEPNPF
AHGLQNMHHA	LCFPHVGLCD	AMRPIDGSKL
IMNLQYTEAN	RYDYVHVGTW	HEGVNLIDY
VSCWCICTAC	KENEYVQDEF	TKACADLGW
CLGILVTLEF	TLIFVLYRDT	PVKSSSREL
RLLVGLSSAM	CYSALVTNTN	RIARILAGSK
VVTLLIMEPP	MPILSYPSIK	EVYLICNTSN
FNEAKYIAFT	MYTTCIIWLA	FVPIYFGSNY
KPERNVRSFA	TTSDVVRMHV	GDGKLPCRSN
GQVPKGQHMW	HRLSVHVKTN	ETACNQTAVI
EDAQPIRFSP	PGSPSMVVRH	RVPSAATTTP
QOPPPQKSL	MDQLQGVVSN	FSTAIPDFHA
QLSTFGEELV	SPPADDDDD	ERFKLLQEV
DSPALTPPSP	FRDSVASGSS	VPSSPVSESV
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gcccagccaa	gaaggtgctg	accctggagg
tgcaccagaa	ggcgggccca	gcagaggact
agcgccctga	ggccatgctt	tttgactcgg
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		ccccctttcg
		ccagctgac
		accacaatg
171	3094	Metabotropic NM_000839
Glutamate Receptor 2		Homo sapiens
		LGSEIRDSW
		HSSVALEQSI
		QVNLQLFDI
		HTEGNYGESG
		CEGTVRGLL
		DDYFLKRLD
		GFVINAIYAM
		EKGDAFGRYD
		QOIKVIRKGE
		IESIAIAFS
		KPTTSCYLQ
		SILISVQLTL
		AFKTRNVNAN
		FTPKMYIIIA
		KSVSWSEPGG
		TKILYNVEEE
		GKSLTFSDTS
		PLFLAEALP
		KGLPPPLQQQ
		PPOHLQMLPL
		EDELEEEED
		LQAASKLTPD
		SSTL
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		cgctctaca
		ccagctgac
		accacaatg

172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	<p>aggctccgctt tgaccgcttt ggtgatggta ttggccgcta caacatcttc acctatctgc  gtgcaggcag tggcgctat cgctaccaga aggtgggta ctgggcagaa ggttgactc  tggacaccag cctcatocca tgggcctcac cgtcagccgg ccccttgccc gctctcgtc  gcagtgaacc ctgcctcag aatgaggtga agagtgtga gccggcgaa gtctgctgt  ggctctgcat tccgtgccag accatgagt accgatgga cgaattcact tgcgctgatt  gtggcctggg gggcgatgcc aatggccagc tgactggctg cctcgactgc cccaggagt  acatccgctg gggcgatgcc tgggctgtgg gacctgtcac catcgctgc ctgggtgcc  tggccacctt gttgtgctg ggtgtctttg tggcgcaaac tggcaccca gtggtcaagg  cttcaggctg ggagctctgc tacatcctgc tgggtgtgtt ctctctctgc tactgcatga  ccttcattt catggcaag ccatccacgg cagtgtgtac cttaaggcgt ctgtgtttgg  gcactgctt ctctgtctgc tactcagccc tgctaccaa gaccaaccgc attgcacgca  tcttcggtgg ggcgcgggag ggtgcccagc ggcacgctt catcagtcct gctcacagg  tggccatctg cctggcactt atctgggccc agctgtcat cgtgtctgcc tggctgtgg  tggaggccacc gggcacaggc aaggagacag cccccgaag cgggaggtg gtgacactgc  gctgcaacca ccgcgatgca agtatgttg gctcgtctgc ctacaatgtg ctctctcag  cgtctgcac cgttatgcc tcaatactc gcaagtgcc cgaaccttc aacgaggcca  agttcattgg cttcaccatg tacaccacct gcatactgt gctggcattg ttgccatct  tctatgtcac ctcacagtac taccgggtac agaccacac catgtgcgtg tcagtcagcc  tcagcggctc cgtgtgtctt ggtgcctct ttgcccacaa cgtcacatc atctctctc  agccgcagaa gaacgtgtt agccacggg caccacacag ccgctttggc agtgcgtctg  ccagggccag ctcagcctt ggccaaagggt ctggtcccca gttgtcccc actgtttgca  atggccgtga ggtgtgtgac tgcacaacgt catcgctttg a</p> <p>RLEAMLFALD RINRDPHLLP GVRLGAIILD SCCKDHALE QALDFVRASL SRGADGSRHI  CPDGSYATHG DAPTAITGVI GGSYSDVSIQ VANLLRLFOI PQISYASTSA KLSDKSRYDY  FARTVPDFF QAKAMAEILR FENWTYVSTE ASEGXYGETG IEAFELEARA RNICVATSEK  VGRAMSRAAF EGVVRALLQK PSARVAULT RSEDARELLA ASQRLNASFT WVASDGMGAL  ESVAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNS PNTRLCDAM RPVNGRRLLYK  DCAHSLRAV PFEQESKIME VVNAVYAMAH ALNHMRALC PNTRLCDAM RPVNGRRLLYK  DFVLNVKFDA PFRPADTHNE VRFDREFDGI GRYNIFTYLR AGSGRYRYQK VGYWAEGLTL  DTSLLPWASP SAGPLAASRC SEPCLQNEVK SVQPGEVCCW LCIPCQPYEY RLDEFTCADC  GLGYWPNASL TGCFELPQEY IRWGDWAVG PVTIACLGAL ATFLVLGVFV RHNATPVVKA  SGRELXYILL GGVFLCYCMT FIFIAPKSTA VCTLRLGLG TAFSVCYSL LTKTNRIARI  FGGAREGAQR PRFISPASQV AICLALISQ LLIIVAWLW EAPGTGKETA PERREVTLR  CNHRDASMLG SLAYNVLIA LCTLYAFNTR KCPENFNEAK FIFTMYTTC IWLALLPIF  YVTSSDYRVQ TTMCVSVSL SGSVLGCIF APKLHILFQ POKNVVSHRA PTSRFGSAAA  RASSLSGQGS GSQFVPTVCN GREVVDSTTS SL</p>	Homo sapiens
173	3095	Metabotropic NM_000840 Glutamate Receptor 3	<p>cttttgtgtc ggatgaggag gaccacacct gagccagagc ccgggtgcag gctcaccgcc A  gccgctgcca ccgctgtcag cttccatctc tgcacgaggt tgcgtgtgc aggaattttg  tgacaggctc tgttagctg ttcctccctt attgaagga caggccaaag atccagtttg  gaaatgagag aggactagca tgacacattg gctccacct tgatatctcc cagaggtaca</p>	Homo sapiens



gaaacaggat tcatgaagat gttgacaaga ctgcaagttc ttaccttagc ttgttttca  
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ggtgaccttg ttttaggggg cctgtttcct attaacgaaa aaggcactgg aactgaagaa  
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gatgaaatca acaagatga ttacttgcta ccaggagtgga agttgggtgt tcacattttg  
gatacatgtt caaggatac ctatgcatg gagcaatcac tggagtgtgt cagggcatct  
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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	<p>tgtttgtttg caccacaagt tcatcatc cgtgttcaac ccagaagaa tgtgtcaca cacagactgc acctcaacag gttcagtgct agtgaactg ggaccacata ctctcagtc tctgcaagca cgtatgtgcc aacggtgtgc aatgggctgg aagtccctga ctccaccac tcatctctgt gattgtgaat tgcagttcag ttcttgtgtt tttagactgt tagacaaa tgctcaactg cagctccaga atattgtgag agagcaaaag aacaacccta gtacctttt ttagaacacg tacgataaat tatttttgag gactgtatat agtgaatgag tagaactttc taggctgagt ctagtgtccc tattattaac aattcccca gaacatggaa ataaccattg tttacagagc tgagcattgg tgacagggtc tgacatggct agtctactaa aaaaacaaa aaaaaaacaa aaaaaaaa aaaaagaaa aataaaaaa tacggtggca atattatga accttttttc ctatgaagtt tttttaggt cctgtgtga actaattag gatgagtttc tatgttgat attaaagtta cattatgtgt aacagattga tttctcagc aaaaaataa aagcatctgt attaatgtaa agatactgag aataaaacct tcaaggtttt MLTRLQVLTL ALFSKGFLLS LGDHNFLRRE IKTEGDLVIG GLFPINEKGT GTEECGRINE P DRGIQRLEAM LFAIDEINKD DYLLPGVKLG VHILDTCSDR TYALEQSLEF VRASLTQVDE AEYMCPPDSY AIQENIPLI AGVIGSYSS VSIQVANLLR LFIQIPQISA STSAKLSDKS RYDYFARTVP PDFYQAKAMA EILRFNWTY VSTVASEGDY GETGIEAFEQ EARLRNICIA TAEKVGRSNI RKSYSVIRE LLQPNARV VLFMRSDSR ELIAAASRAN ASFTWVASDG WGAQESIIG SEHVAYGALT LELASQPVQ FDRYFQSLNP YNNHRNPWR DFWEQKQCS LQKNRHRV CDKHLAIDSS NYEQSKIME PFNPKDADS IVKEDTFGDG MGRYNVNFQ NVGGKYSYLK KILDGKKLYK DYLLKINFTA DVNSIHWARN SVPTSQSDP CAPNEMKNMQ PGDVCCWICI PCEPYEYLAD VGHWAETLSL DVNSIHWARN SVPTSQSDP EDAWAIGPVT IACLGFMCTC MVTVFIKHN EFTCMDGSG QWPTADLTGC YDLPEDYIRW IAKPSPVICA LRRGLGSSF AICYSALLTK NPLVKASGR ELCYILLFGV GLSYCMTFFF IAKPSPVICA LRRGLGSSF AICYSALLTK TNCIARIFDG VKNGAQRPKF ISPSQVFC LGLILVQIVM VSWLILEAP GTRRYTLAEK RETIVLKNV KDSSMLISLT YDVIILVILCT VYAFKTRKCP ENFNEAKFIG FTMVTTCTIHW LAFLPIFYVT SSDYRVQTTT MCISVLSLGF VVLGCLFAPK VHIILFQPK NVVTHRLHLN RFSVSGTGT YSQSSASTV PTVNCGREVL DSTTSSL</p> <p>ccgagtgaca agaggtggg agaggttagc agcatggct acgcggttg ctagcctcag A tccccctgct gctgaagctg cctgcccacat gccacccacag gccgtgggc caggggcctg ccagggtcag gagtggcctt gccgttcctg ggtctctag gattccgag atgctggga agagaggtt gggctggttgg tgggcccgc tggcccttg cctgctctc agcctttacg gccccggat gccttctcc ctgggaaagc ccaagggca cctccacatg aattccatcc gcatagatgg ggacatcaca ctgggagggc tgttcccgt gcatggcccg ggtcagagg gcaagccctg tggagaactt aagaaggaaa agggcatcca ccgctggag gccatgctgt tcgcccctga tcgcatcaac aacgaccgg acctgctgc taacatcacg ctgggcgccc gcattctgga cactgtctcc agggacacc atgcccctga gcagtgcgtg accttgtgc aggcgtcat cgagaaggat ggacagagg tccgctgtgg cagtggcggc ccaccatca tcaccaagcc tgaacgtgtg gtgggtgtca tccgtgttc agggagctcg gctccatca tggtggccaa catccttcgc ctcttcaaga taccacagc cagtacgccc tccacagcgc cagacctgag tgacaacag cgtacgact tcttctccc cgtgtgtccc tcggacacgt accaggccca ggccatggtg gacatcgctc gtgcccctca gtggaactat gtgtccacag</p>	Homo sapiens
175	3096	Metabotropic NM_000841 Glutamate Receptor 4		Homo sapiens

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tgttggcgac cctctgtct gtctccagcc ctgtcttct ctctctttt

176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p>caccttttcc ctctctggcg tccccggctg cttgtactct tggccttttc tgtgtctcct  tcttggtctt tgccctcgcc tctctctctc atcctctttg tctcagctc ctccctgctt  cttggttccc accagtgtca cttttctgce gttttcttct ctgttctcct ctgcttcatt  ctcgtccagc cattgtctcc ctctccctgc cacccttccc cagttcacca aaccttacct  gttgcaaaag agaaaaaag aaaaaaatc aaaaacaaa aaagccaaaa cgaatacaaa  tctcagtggt gttgccaagt gctgctctct cctggtggcc tctgtgtgtg tccctgtggc  ccgcagcctg ccgcctctgc ccgcccatct gctggtgtgc ttgcccgcct gccccgcctg  tctgcgctct gtcttgcccg cctgcccgcg cctgcccgcg ccgaccaca cggagttcag  tgccctgggtg tttggtgatg gttattgacg acaatgtgta gcgcatgatt gttttatcac  caagaacatt tctaataaaa ataaacacat ggttttgcaa aaaa</p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p>MPGKRLGWW WAKPLCLLL SLYGPMMPSS LGKPKGHPHM NSIRIDGIT LGGLFPVHGR P  GSEKPCGEL KKEKGIHRL AMLEALDRIN NDPDLLNIT LGARILDTC RDTHALEQSL  TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGSS VSMVANILR LFKIPQISYA  STAPDLSDNS RYDFSRVVP SDTYQAQAMV DIVRAIKWNY VSTVASEGSY GESGVEAFIQ  KSREDGGVCI AQSVKIPREP KAGEFDKIR RLLETSNARA VIIFANEDDI RRVLEAARRA  NQTHFFWMG SDSWGSKIAP VHLLEVAEG AVTILPKRMS VRGFDRYFSS RTLDNNRRNI  WFAEFWEDNF HCKLSRHALK KGSVKKCTIN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL  HAMHRDLCPG RVGLCPRMDP VDGTLQLLKYI RRVNFSGIAG RNVTFNENG AGRYDIYQY  QLRNDSAEYK VIGSWTDHLH LRIERMHWPG SQQLPRISIC SLPCQGERK KTVKGMPCW  HCEPCTGYQY QVDRYTCTC PYDMRPTENR TGCRIPIIK LEWGSWAVL PLFLAVVGTA  ATLFVITFV RYNDTPIVKA SGRELSYVLL AGIFLCYATT FLMAEPDLG TCSLRRIFLG  LGMSISYAAL LTKNRIYRI FEQKRSVSA PRFISPASQL AITFSLISLQ LLGICVWFV  DPSSHVVDFQ DQRTLDPRFA RGVLKCDISD LSLICLLGYS MLLMVTCTVY AIKTRGVPET  FNEAKPIGFT MYTTCIVWLA FIPIFFGTSQ SADKLYIQTT TLTVSVLSA SVSLGMLYMP  KVYIILFHE QNVPKRKRSI KAVVTAATMS NKFTQKGNFR PNGEAKSELC ENLEAPALAT  KQTYVTYTNH AI</p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p>acaaaatggt cctttagaaa atacatctga attgctggct aatttcttga tttgcgactc A  aacgtaggac atcgcttggt cgtagctatc agaaacctcc tgaattttcc ccaccatgct  atctttattg gcttgaactc ctttccctaaa atggtccttc tgttgatcct gtcagttcta  cttttgaaaag aagatgtccg tgggagtgca cagtcacagt agaggagggg ggtggctcac  atgccegggtg acatcattat tggagctctc ttttctgttc atcaccagcc tactgtggac  aaagtcatg agaggaaagt tggggcggtc cgtgaacagt atggcattca gagagtggag  gccatgctgc ataccctga aaggatcaat tcagacccca cactcttgcc caacatcaca  ctgggctgtg agataaggga ctctgctggt cattcggtg tggccctaga gcagagcatt  gagttcataa gagattccct catttcttca gaagaggaaag aaggcttggg acgctgtgtg  gatggctcct cctcttctct ccgctccaag aagcccatag taggggtcat tgggctggc  tccagttctg tagccattca ggtccagat ttgtctcagc ttttcaaat acctcagatt  gcttactcag caaccagcat ggatctgagt gacagactc tgttcaata tttcatgagg  gttgtgcctt cagatgctca gcaggcaagg gccatggtg acatagtga gaggtacaac  tggacctatg tatcagcctg gcacacagaa ggcaactatg gagaaagtgg gatggaagcc  ttcaaaagata tgcagcgaa ggaagggaatt tgcctgccc actcttaca aatctacagt</p>	Homo sapiens

aatgcagggg agcagagcct tgataagctg ctgaagaagc tcaaaagtca cttgcccag  
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tctccgatg tcaagtgggt tatgatattat tcttgaagc tccggccaga acaaacccac  
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ctcttataa tggagcctcc tgacataatg catgactacc caagcattcg agaagtctac  
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 tgctgcttat gtgccaattt agtggaataa acaacacct gctgaaaaat tccctcttcc  
 catctctctt caattctgt atattgtcca agaagtatc ataaggaaat tc  
 MVQLRKLRLV LTLKFPCCV LEVLLCALAA AARGQEMVAP HSIRIEGDTV LGGLFPVHAK P  
 GPSPVPCGDI KRENGIHRLE AMLYALDQIN SDPNLLPNVT LGARLIDTCS RDTYALEQSL  
 TFVQALIQKD TSDVRCNGE PPVEVKPEKV VGVIGASGSS VSMVANILR LFQIPQISYA  
 STAPELSDDR RYDFFSRVP PDSFQAQAMV DIVKALGNY VSTLASEGSY GEKGVESFTQ  
 ISKEAGGLCI AQSVRIPOER KDRITIDFRI IKQLLDTNPS RAVIFANDE DIKQILAAK  
 RADQVGHFLW VGSDSWGSKI NPLHQHEDIA EGAIITIQPKR ATVEGFDAYF TSRTLENNRR  
 NWFAEYWEI NFNCKLTISG SKKEDTRKC TQGERIGKDS NYEQEGKVQF VIDAVYAMAH  
 ALHHMNKDLG ADYRGVCPPEM EQAGGKKLLK YIRNVNFGS AGTPVMFNKN GDAPGRYDIF  
 QYQTTNTSNP GYRLIGQWTD ELQINIEDMQ WKGKGVREIPA SVCTLPCKPG QRKTKQKTP  
 CCWTCEPCDG YQYQFDEMTG QHCPYDQPN ENRTGCQDIP IIKLEWHSPW AVIPVFLAML  
 GIATIFVMA TFIRYNDTPI VRASGRELSY VLLTGIFLCY IITFLMIAKP DVAVCSFRRV  
 FLGLGMCISY AALLTKTNRI YRIFEQKKKS VTPRLISPT SOLAITSSLI SVQLLGVFIV  
 FGVDPNNII DYDEHKTNP EQARGVLKCD ITDLQIICSL GYSILLMVC TVYAIKTRGV  
 PENFNEAKPI GFTMYTTCIV WLAFIGPFFG TAQSAEKLYI QTTTITISMN LSASVALGML  
 YMPKVYIIF HPENLVQKRK RSEKAVVTAA TMSSRLSHKP SDRPNGEAKT ELCENVDPNS

182 3099 Metabotropic NP\_000835.1  
 Glutamate  
 Receptor 7 Homo sapiens

PAAKKKYVS Y NNLVI

tgctgtgttg caagaataaa ctttgggtct tggattgcaa taccactgtt ggagaaaatg A  
gtatgcgagg gaaagcgtac agcctcttgc ccttgtttct tcctcttgac cgccaagtct  
tactggatcc tcacaatgat gcaagaact cacagccagg agtatgccc ttcatacgg  
gtggatgggg acattatttt ggggggtctc ttccctgtcc acgcaaaagg agagagaggg  
gtgccttctg gaggctgaa gaagaaaaag gggattcaca gactggaggc catgctttat  
gcaattgacc agattaacaa gaacccctgat cctctttcca acatcactct ggtgtgccg  
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gcattaatag agaaagatgc ttcggtatgt aagtgtgcta atggagatcc accattttc  
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gttgctaaca ttttaagact ttttaagata cctcaaatca gctatgcctc cacagcccc  
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caagcccaag ccatggttga catcgtgaca gcactgggat ggaattatgt ttcgacactg  
gcttctgagg ggaactatgg tgagagcgggt gtggagcctt tcaccagat ctogagggag  
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atgcagtggg ctcatagaga acatactcac cggcgtctg tctgcagcct gccgtgtaag  
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ccttgggctg tgggtgctgt gtttgttga atattgggaa tcatcgccac cacctttgtg  
atcgtgacct ttgtccgcta taatgacaca cctatcgtga gggcttcagg acggaactt  
agttacgtgc tctaaccggg gattttctc tgttattcaa tcacgttttt aatgatgca  
gcaccagata caatcatatg ctccctccga cgggtcttcc taggacttgg catgtgttct  
agctatgcag ccttctgcag caaaacaaa cgtatccacc gaatatttga gcagggaaag  
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atcattgact atggagagca gcggacacta gatccagaga aggccagggt agtgcacaag  
tgtgacattt ctgatctctc actcatttgt tcaattgat acagtatcct ctgtatggtc

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	<p>actgtgactg tttatgcaa taaacgaga ggtgtcccag agaattcaa tgaagccaaa  cctattgat ttaccatgta taccacctgc atcatttgtg tagctttcat ccccatcttt  tttggtaacg cccagtcagc agaaaagatg tacatcaga caaacacact tactgtctcc  atgagtttaa gtgcttcagt atctctgggc atgctctata tgcccaaggt ttatattata  atthttcatc cagaacagaa tgttcaaaaa cgaagagga gcttcaaggc tgtggtgaca  gctgccacca tgcaaaagcaa actgatccaa aaaggaaatg acagaccaa tggcgaggtg  aaaagtgaac tctgtgagag tcttgaaacc aacacttctt ctaccaagac aacatatatc  agttacagca atcatccaat ctgaacacag gaaatggcac aatctgaaga gacgtggtat  atgatcttaa atgatgaaca tgagaccgca aaaattcaat cctggagatc tccgtagact  acaatcaatc aaatcaatag tcagtcttgt aggaacaaa aattagccat gagccaaaag  tatcaataaa cggggagtga agaaacccgt tttatacaat aaaccaatg agtgtcaagc  taaagtattg cttattcatg agcagttaaa acaaatcaca aaaggaaaac taatgttagc  tcgtgaaaaa aatgtgtgtg aaataaataa tgtctgtagt tattcttgta ttttctgtg  attgtgagaa ctccogttcc tgtcccacat tgtttaactt gtataagaca atgagttctgt  ttcttgtaat ggtgaccag attgaagccc tgggttgtgc taaaaataaa tgcaatgatt  gatgcatgca atthttata caaataattt atttctaata ataaaggaat gttttgcaaa  aaaaaaaaa aaaaactcga g</p>	Homo sapiens
185	3212	Opioid mu- type Receptor	<p>ggaattcccg ctataggcag aggagaatgt cagatgctca gctcgtctcc ctccgctga A  cgctcctctc tgtctcagcc aggaactggtt tctgtaagaa acagcaggag ctgtggcagc  ggcgaaaaga agcggttag ggcgttgga cccgaaaagt ctggtgtctc ctggctacct  cgcacagcgg tgcccgccc ggcgtcagta ccatggacag cagcgtgccc cccacgaacg  ccagcaattg cactgatgcc ttggcgtact caagtgtctc cccagcacc agccccggtt  cctgggtcaa cttgtccac ttagatggca acctgtccga cccatgctgt cccaaccgca  ccaacctggg cgggagagac agcctgtgccc ctccgaccgg cagtcctctc atgatcacgg  ccatcacgat catggccctc tactccatcg tgtgctgtgt ggggctcttc ggaacttcc</p>	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	MDSSAAPTNA PTGSPSMITA STLPFQSVNY RTPRNAKIIN FAFIMPVLII YVIIKALVTI EQONSTRIRQ atgaacacatt ggctccctggc acagggaacc aactacttcc ctctatacca	tggtcatgta tcaaccttgc acctaatggg actataacat cagttctgca atgtctgcaa caaaatacac gggaaaaact ttaccgtgtg ccaaagaaaa tgttcacgtg tcccagaaac acagctgcct gagagtcttg agaacactag aaaatctgga caccagctt ctctaattct ctctgctctg tataccacac gtatgtgaat gcaaatattt cataaagtaa tgtttttgca tagcatctgg aataacatct tctgaaacac ccaaaagagtc tc	tggtgattgc gccttagcca tttggaacca atattcaccc gccttagatt tcttcagcca atagattgta tgtgttttca cttcgaagga cttcgaagga ccattcacca actgtttctt ctttatgcat tcttccaaca tccacggcca gtccogttgc atgtatgtgg gcctactttt ggacagccaa agtaagtgg agacacccag atattgtgca ataaaaggtg caaagaagaa tgatcaaacg tccattatc tattttagac ccatttcttg gtccataaat gctccataat gtccataat canctgtaga atctttcatt cttaggcttt	agatgaagac ccagtaccct tcctttgcaa tctgcaccat tccgtactcc tgggtcttcc cactaacatt tcttcgctt gcctcaagag tcaccaggtg ttacgtcat ggcacttctg tcttgatga ttgagcaaca atacagtga cctaacaggg aagcaggtg aggtcatcca agctacttt ttaaagttc gaagtcoga ttttaaactc gttttgaata gagattagca cctcatgcact ncaaatactt cagtggtttg	tgccaccaac gcctttccag gatagtgc gagtggtgat cgaataatg tgaatgttc ctctcatcca cattatgcca gtgcctcatc tgcctcgcat gggtctggg cattaaagcc cattgtctca aaacttcaaa aaactccact tagaactaat tctcatgcca cttcaagaat tctctggcca agcatttgg tggaaccaa cctctctgt ctgtaagatt ttaaagttc cgaagtcoga ttttaaactc gttttgaata gagattagca cctcatgcact ncaaatactt cagtggtttg	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	atgaacacatt ggctccctggc acagggaacc aactacttcc ctctatacca	tggtgattgc gccttagcca tttggaacca atattcaccc gccttagatt tcttcagcca atagattgta tgtgttttca cttcgaagga cttcgaagga ccattcacca actgtttctt ctttatgcat tcttccaaca tccacggcca gtccogttgc atgtatgtgg gcctactttt ggacagccaa agtaagtgg agacacccag atattgtgca ataaaaggtg caaagaagaa tgatcaaacg tccattatc tattttagac ccatttcttg gtccataaat gctccataat gtccataat canctgtaga atctttcatt cttaggcttt	agatgaagac ccagtaccct tcctttgcaa tctgcaccat tccgtactcc tgggtcttcc cactaacatt tcttcgctt gcctcaagag tcaccaggtg ttacgtcat ggcacttctg tcttgatga ttgagcaaca atacagtga cctaacaggg aagcaggtg aggtcatcca agctacttt ttaaagttc gaagtcoga ttttaaactc gttttgaata gagattagca cctcatgcact ncaaatactt cagtggtttg	tgccaccaac gcctttccag gatagtgc gagtggtgat cgaataatg tgaatgttc ctctcatcca cattatgcca gtgcctcatc tgcctcgcat gggtctggg cattaaagcc cattgtctca aaacttcaaa aaactccact tagaactaat tctcatgcca cttcaagaat tctctggcca agcatttgg tggaaccaa cctctctgt ctgtaagatt ttaaagttc cgaagtcoga ttttaaactc gttttgaata gagattagca cctcatgcact ncaaatactt cagtggtttg	accaggaag agccacagt cgaggtcaa gacagtcaat tcggtacct gcacgtggc tcctgtcgt tcctgt	

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tggctggccc tggactatgt ggcagcaat gcctccgtca tgaatctgt gctcatecagc  tttgaccgct acttctccgt gactcgcccc ctgagctacc gtgccaagcg cacaccccg  cggcagctc tgatgatcgg cctggcctgg ctggtttcct ttgtgctctg ggcacccg  atcctctctt ggcagtaacct ggtaggagg cggacgatgc tagctgggca gtgtacatc  cagttcctct cccagcccat cctacacctt ggcacagcca tggctgcctt ctacctcct  gtcacagtca tgtgacgct ctactgcgc atctaccgg agacagagaa ccgagcacgg  gagctggcag cccttcagg ctccgagag ggctgaggg ccagggaaa ggggtggcag cagcagcagc  tcagagaggt ctacagccagg gctgagggc tcaccagaga gctctccagg ccgctgctgt  cgctgctgcc gggcccccag gctgctgcag gcctacagct ggaaggaaga agaggaagag  gacgaaggct ccatggagtc cctcacatcc tcagagggag agggagcctgg ctccgaagtg  gtgatcaaga tgccaatggt ggacccgag gacaggccc ccaccaagca gccccacgg  agctcccaa atacagtcaa gaggccgact aagaaaggc gtgatcgagc tggcaagggc  cagaagcccc gtggaagga gcagctggcc aagcggaaga ccttctcgt ggtcaaggag  aagaaggcgg ctcggaacct gactgacct ctcctggcct tcactctcac ctggacacgg  tacaacatca tggctgctgt gtccaccttc tgaaggact gtgtcccgga gacctgtgg  gagctgggct actggctgtg ctacgtcaac agcaccatca accccatgtg ctacgcactc  tgcaacaaag ccttccggga cacttctgc tctgtgctgc tttgcgctg ggacaaaga  cgctggcgca agatccccc aagcctctggc tccgtgcacc gcaactccctc ccgccaatgc  tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> atgaataact caacaaactc ctctaacaat agcctggctc ttacaagtc ttataagaca A  tttgaagtgg tgtttattgt cctgtggctt ggatccctca gtttggtagc cattatcggg  aacatcctag tcatggttct cattaaagtc aaccgccacc tccagaccgt caacaattac  ttttattca gcttggcctg tctgacctt atcataggtg ttctctccat gaactgtac  acctctaca ctgtgattgg ttaactggcct ttgggacctg tgggtgtgga ccttggcta  gcctggact atgtggtcag caatgccctca gttatgaatc tgcatacat cagctttgac  aggtacttct gtgtcacaaa acctctgacc taccagtc aagcgaccac aaaaatggca  ggtatgatga ttgcagctgc ctgggtcctc tctttcatcc tctgggctcc agccattctc  ttctggcagt tcatgtagg ggtgagaact gtggaggatg gggagtgtca cattcagttt  ttttccaatg ctgctgtcag ctttggtagc gctattgcag ccttctattt gccagtgtac  atcatgactg tgctatatgg gcacatatcc cgagccagca agacaggat aagaaggac  aagaaggagc ctgttgccaa ccaagacccc gtttctccaa gtctgtgata aggaaggata  gtgaagccaa acaataacaa catgcccagc agtgacgatg gcctggagca caacaaatc  cagaatggca aagccccag ggatcctgtg actgaaact gtgttcaggg agaggagaag </p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p>gagagctcca atgactccac ctcaagtcagt gctgttgctt ctaatatgag agatgatgaa  ataaccaggt atgaatacac agtttccact tccctgggccc attccaaaga tgagaactct  aagcaaacat gcatcagaat tggcaccacag acccaaaaa gtgactcatg taccccaact  aataccaccg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt  gtagcccgca agattgtgaa gatgactaag cagccctgcaa aaaagaagcc tccctcctcc  cggaataaga aagtcaccag gacaatcttg gctattctgt tggctttcat catcacttgg  gcccataca atgtcatggt gctcattaac acctttgtg cacttgcat ccccaacact  gtgtggacaa ttggttactg gctttgttac atcaacagca ctatcaaccc tgcctgtctat  gcactttgca atgccacctt caagaagacc tttaaacacc ttctcatgtg tcattataag  aacataggcg ctacaagta a</p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p>MNNSTNSSNN SLALTSPYKT FEWFIVLVA GSLSLVTIIG NILVMVSIKV NRHLQTVNNY P  FLFLSLACADL IIGVFSMNLV TLYTVIGWYP LGPVVCDLWL ALDYVVSNAS VMNLLIISFD  RYFCVTKPLT YPVKRTTKMA GMMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF  FSNAAVTEGT AIAAFYLPVI IMTVLYWHIS RASKSRIKDD KKEFVANQDP VSPSLVQGRV  VKPNNNNMPS SDDGLEHNI QNGKAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDE  ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTVEVWVSS GQNGDEKQNI  VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYNVMVLIN TFCAPCIPNT  WVTIGWLVCY INSTINPACY ALCNATFKKT FKHLMLCHYK NIGATR  CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCGGGAAGG TCTTTTAA A  GGTGGCGTGG CACAGAGCAT AGCAGGCGAG GTTGATGGTG CTGTGACGT AGCAGAGCCA  GTAGCCAATG GACCACACCG GGTGAGGATG GCAGCTCTGG CAGAAGGTGT TCACCAGGAC  CATGACGTTG TGAGGCGTCC CCGTGAGGAT GAAAGTAAAC ANAATGGCAA AGATCGGTGG  TGGCATTGTTG CGCTCCCGGG CCCGCATCTG CCGCTTCTTG CGCACCTGGG TGCGAGCGAT  GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGGCGCATGC CAGNCGGCGT GGGAGGGACA  ATCTCAGGGC TGGCACACAC TCATGGGCTG GCTGGCTTCG TCAAAATTTG GATCTTGGAC  CATCTGGGAG GCTTGGTTGA AGCCCCCGG CTGGGACTTG CCGGCATGAA TCCAGGCCCTT  ACTCTANAGG ATCCCCCCT CTCC</p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p>atggcacaact tcaacacctgt caatggcagc tcgggcaaatc agtccgtgag cctgggtcagc A  tcatacatccc acaatcgcta tgagacggtg gaaatgggtct tcaattgccac agtgacaggc  tccctgagcc tggtagctgt cgtgggcaac atctgggtga tgctgtccat caaggtcaac  aggcagctgc agacagtcac caactacttc ctcttcagcc tggcgtgtgc tgatctcatc  ataggcgctt tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccctgc  ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagagaa cgcctccgtc  atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaaccaagc tctcacctac  cctgcccggc gcaaccacaa gatggcagcc ctcatgattg ctgctgacct ggtactgtcc  ttcgtgctct gggcgccctgc catcttgttc tggcagtttg tggtaggtgaa gcggacggtg  cccgacaacc actgcttcac ccagttccctg tccaaccacag cagtgcactt tggcacagcc  attgctgctt tctacctgcc tgtggtcatc atgacggtgc tgtacatcca catctccctg  gccagtcgca gccgagtcga caagacccgg ccgaggggccc ggaaggagaa gaaagccaag  acgtggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga  ggcgcggcgg gaggactgag caatggcaag ctggaggagg cccccccc agcgtgcca</p>	Homo sapiens



193	3226	Muscarinic acetylcholin e Receptor M4	NP_000732.1	<p>cgccaccgc gccccgtggc tgataaggac acttocaatg agtcacagtc aggcagtgcc  accagaaca ccaaggaacg cccagccaca gágtgtcca ccacagaggc caccactccc  gccatgcccg cccctccct gacgcgagg gcectcaacc cagcctceag atggtccaaag  atccagattg tgacgaagca gacaggcaat gágtgtgtga cagccattga gattgtgcct  gccacgcccg ctggcatgcg cctgcggcc aagtgggccc gcaagttcgc cagcatcgct  cgcaaccagg tgcgcaagaa ggcgcagatg gcggcccgg agcgcaaat gacacgaacg  atcttgcca ttctgtagc ctctacctc accgagcgc cctacaaagt catggtcctg  gtgaacacct tctgccagag ctgcacccct gacacgggtg ggtccattgg ctactggctc  tgctacgtca acagacccat caacctgcc tctatgctc tgtgcaacgc caccitaaa  aagaccttc gccacctgct gctgtgccag tatcggaaca tcggcactgc caggtag  MANFPPVNGS SGNQSVRLVT SSSHRYETV EMVFIATVTG SLSLTVVVG N ILVMSIKVN P  RQLQTVNNYF LFSLACADLI IGAFSNLYT VYIKGYWPL GAVVCDLWLA LDYVVSNASV  MNLIIISFDR YFCVTKPLTY PARRTKMAG LMTAAAWLS FVLWAPALF WQFVVGKRTV  PDNHCFTQFL SNPAVTFGA IAAFYLPWI MTVLYIHISL ASRSRVHKHR PEGPKKKAK  TLAFLKSPLM KQSVKKPRPG GRPGGLRNGK LEEAPPPALP PPPRPVADKD TSNESSGSA  TQNTKERPAT ELSTTEATP AMPAPLQPR ALNPASRWSK IQIVTKOTGN ECVTAIEIVP  ATPAGMRPAA NVARKEASIA RNQVRKKRQM AARERKVTRT IFAILLAFIL TWTPYNNVMVL  VNTFCQSCIP DTWISIGYWL CYVNSTINPA CYALCNATFK KTFRHLILCQ YRNIGTAR  atggaagggg attcttacc aactgcaacc accgtcaatg gcacccagtc aaatcaccag A  ccttgggaac gccacaggtt gtgggaagtc atcaccattg cagctgtgac tgctgtggta  agcctgatac ccattgtggg caatgtcttg gtcatgatct ccttcaaatg caacagccag  ctcaagacag ttaacaacta ttacctgctc agcttagcct gtgcagatct catcattgga  atcttctcca tgaacctcta caccacctac atctcatgg gacgtgggc tctcgggagt  ctggcttggt acctttggct tgcactggac tacgtggcca gcaacgcttc tgtcatgaac  cttctgggtg tcagttttga ccgttacttt tccatcacaa gaccttgac atatcgggcc  aagcgtactc cgaaaagggc tggcatcatg attggcttgg cctggctgat ctcttcac  ctctgggccc cagcaatcct ctgctggcag tacttggttg ggaagcggac agttccactg  gatgagtgc agatccagtt tctctctgag cccaccatca ctttggcac tgcattgct  gccttctaca tccctgttcc tgtcatgacc atcctctact gtccaatcta ccgggaacaa  gagaagcgaa ccaaggacct ggctgacctc cagggttctg actctgtgac caaagctgag  aagagaaagc cagctcatag ggctctgttc agatcctgct tgcgtgtgccc tgcacccacc  ctggcccagc gggaaaggaa ccaggccctcc tggtcactct ccgcaggag cactccacc  actgggaagc catcccaagc cactggccca agcgcctaat gggccaaagc tgagcagctc  accacctgta gcagctaccc ttctccagag gatgaggaca agcccgccac tgacctgtc  ctccaagtgg tctacaagag tcagggttaag gaaagccccc ggggaagaatt cagtgctgaa  gagactgagg aaacttttgt gaaagctgaa actgaaaaa gtgactatga caccctaac  taccttctgt tccagcagc tgtcataga cccaagagtc agaatgtgtt ggcctataag  ttccgattgg tggtaaaagc tgacggggaac caggagacca caatggctg tcacaagggtg  aaaatcatgc cctggccctt cccagtggcc aaggaacctt caacgaaagc cctcaatccc  aaccacgac atcaaatgac caaacgaaag agagtggctc tagtcaaga gaggaaagca  gccagacac tgaagtgcct tctctggcc ttcatcatca catggacccc gataacatc</p>	Homo sapiens
194	3227	Muscarinic Acetylcholin e Receptor M5	NM_012125	<p>atggaagggg attcttacc aactgcaacc accgtcaatg gcacccagtc aaatcaccag A  ccttgggaac gccacaggtt gtgggaagtc atcaccattg cagctgtgac tgctgtggta  agcctgatac ccattgtggg caatgtcttg gtcatgatct ccttcaaatg caacagccag  ctcaagacag ttaacaacta ttacctgctc agcttagcct gtgcagatct catcattgga  atcttctcca tgaacctcta caccacctac atctcatgg gacgtgggc tctcgggagt  ctggcttggt acctttggct tgcactggac tacgtggcca gcaacgcttc tgtcatgaac  cttctgggtg tcagttttga ccgttacttt tccatcacaa gaccttgac atatcgggcc  aagcgtactc cgaaaagggc tggcatcatg attggcttgg cctggctgat ctcttcac  ctctgggccc cagcaatcct ctgctggcag tacttggttg ggaagcggac agttccactg  gatgagtgc agatccagtt tctctctgag cccaccatca ctttggcac tgcattgct  gccttctaca tccctgttcc tgtcatgacc atcctctact gtccaatcta ccgggaacaa  gagaagcgaa ccaaggacct ggctgacctc cagggttctg actctgtgac caaagctgag  aagagaaagc cagctcatag ggctctgttc agatcctgct tgcgtgtgccc tgcacccacc  ctggcccagc gggaaaggaa ccaggccctcc tggtcactct ccgcaggag cactccacc  actgggaagc catcccaagc cactggccca agcgcctaat gggccaaagc tgagcagctc  accacctgta gcagctaccc ttctccagag gatgaggaca agcccgccac tgacctgtc  ctccaagtgg tctacaagag tcagggttaag gaaagccccc ggggaagaatt cagtgctgaa  gagactgagg aaacttttgt gaaagctgaa actgaaaaa gtgactatga caccctaac  taccttctgt tccagcagc tgtcataga cccaagagtc agaatgtgtt ggcctataag  ttccgattgg tggtaaaagc tgacggggaac caggagacca caatggctg tcacaagggtg  aaaatcatgc cctggccctt cccagtggcc aaggaacctt caacgaaagc cctcaatccc  aaccacgac atcaaatgac caaacgaaag agagtggctc tagtcaaga gaggaaagca  gccagacac tgaagtgcct tctctggcc ttcatcatca catggacccc gataacatc</p>	Homo sapiens



197	3378	Tachykinin Receptor 3	NP_001050.1	<p>aaggtagtgt ataatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt</p> <p>MATLPAETW IDGGGGVAD AVNLTASLAA GAATGAVETG WLQILDQAGN LSSSPSALGL P PVASPAPSQ WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVIIWII LAHKRMRTVT NYFLVNLAFS DASMAAENTL VNFYIALHSE WYFGANYCRF QNFFPITAVF ASIYSMTAIA VDRYMAIDP LKPRLSATAT KIVIGSIWIL AFLIAPQCL YSKTKVMPGR TLCFVQWPEG PKQHFTYHII VIIIVYCFPL LIMGITYTIV GITLWGGEIP GDTCDKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI LTAIYQQLNR WKYIQQVYLA SFWLAMSSTM YNPIIYCCIN KRFRAGFKRA FRWCPFIKVS SYDELELKT RFHNRQSSM YTVTRMESMT VFDPNDADT TRSSRKRRAT PRDPSFNGCS RRNSKSASAT SSFISPYTS VDEYS</p>	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	<p>gtgctgtgag gcttgccgc ggacagtaaa cttgcagggg cgagagggag ggacatcgat A taaacctaaa tctgtggcgt tcaagtccca gggcaccgag cgcgtgaaaa ctccagcgga ctctgtgga aaggagatca tgccctctaa gtctcttcc aacctctcg tgaccaccgg cgcgaatgag agcgggtccg ttcccagggg gtgggaaagg gatttcctgc cggcctcgga cgggaccacc acggagttgg tgatccgctg tggatcccc tccctctacc tgctcatcat cacctgggc ttgctgggca acatcatgct ggtgaagatc tccatcaca acagcgccat gaggagcgtc cccaacatct tcatctctaa cctggcgccc ggggacctgc tgctgtgct cacctgcgc cgggtggag cctgcgccta cttcttcgac gagtggatgt ttggcaaggt gggtgcaaa ctgataccctg tcatccagct cacttccgtg ggggtttccg tgttcaactc cactgcccc agcgcgcaca ggtacagagc catcgttaac cccatggaca tgcagacgtc aggggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggtct ccgtgtgct ggcagttccc gaagcgggtgt ttacagaagt ggtcgcgcat agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaaaga ttcattcagt gctcatttct ttggtctatt tctcctacc acttgctatt attagcattt attattatca tattgcaaa accttaatta aaagcgcaca caatctcct ggagaatata atgaacatac caaaaaacag atggaaacac ggaacgcct ggtataaatt gtgcttgtct ttgtgggtg tttcatcttc tgttggttcc caaacacat cctttacatg tatcggtctt tcaactataa tgagattgat ccatctctag gccacatgat tgtcacctta gttgcccggg ttctcagttt tggcaattct tgtgtcaacc catttgctct ttacctactc agtgaaggct ttcagaggt tttcaacagc caactctgct gtgggaggaa gtctatcaa gagagaggaa ccagctacct actcagctct tcagcgggtgc gtatgacatc tctgaaaagc aatgctaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggcc attcaactca ctacctggag agaacttagt aa</p>	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1	<p>MESKLSNLS VTGANESGS VPEGWERDFL PASDGTTEL VIRCVIPSLY LLITVGLLG P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLTCTVPVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGVS VFTLTALSAD RYRAIVNPMQ MQTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSFTACIP YPQTDLHPK IHSVLIFLVY FLIPLAISI YYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVGCFFCFWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRRHFNSQLC CGRKSQERG TSYLLSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM</p>	Homo sapiens

200	3404	Neuropeptide NM_000910 Y Receptor Type 2	tatactatcc ctatcctagc ttttaacctg agccagagct cactacacag gttcctggct A	Homo sapiens
			atcgaagtctg aatctgcact actcaactta taaactgtct gcagacacct gttagggaat ttgctgatca tggcgccgag gatctgaact cgttttacct tcttgttttg agcacaggga ccgccagct agaggagcac cagcgactg cgcccagcc ctggcgagg gtgcgagga ttgttctctg ttgcaatcct gctggcgctt ttcgggggtt ctgcgcgat ccagctcccc atctctgtc ctacacacac aaaaagaaac aactctgat ttgaagtgt ggaattttct cagccccctac gagcgccggg gattctccag ccccgccct cctcccgcga gctgaaggtc tccttcgctc gcttccttg ctagggaccg cagtcctca gccgcagctg ggtctgtccg ccccgcctt gccctgcct tttcccggg cggtatttgt gaagtcggc tcaagtcacg gaggtctgtc ttcccgccg cagctctgc ggaactggg ggtagagagc aaaggagag atctgtgaa ggaagggag gtgagagca gcagctgcag gtgtgtgctg gggaccgcg agggggcgcc tggeacagta ggtgagagca ggtctggtt gagcgccctt gaaagcccg gagcgctg agagacctg cctctgggta ggtctggtt gagcgccctt gaaagcccg gagcgctg agagacctg gacactgtc ctgctccct gccacaaaa cctctctctc agtccccct cctgcaggac cctgcctgc agcctctgca cctgttttct tgtgtttaag ggtggggtt gccccctcc ccagctccc atctctgac ctcccacott caccgcgcca cccgcgagt ggtgcggtg ccaggcgcg cttggcctga gaggtcggca gcagaccccg cagcgccac cggccagccg ctctgactg tccggctgc cgcgcgcg cgcggggctg tctggacc taggagggga cggaaccgga cttgccttg gccaccttc aggcctctc ccaggtcggc tggctaata tcggacagac ggaactgcaca catctgttt tgggtgctc gcaaaaaac gaggtccagg tcagttgtg actctgtgc tgggtgcagg ccaagtggac ctgtactgaa aatgggtcca ataggtgcag aggtgatga gaaccagca gtggaagaa tgaaggtgga acaataggg ccacaaaca ctctagagg tgaactgttc cctgacctg agccagagct tatagatagt accaagctga ttgaggtaca agttgtctc atattggct actgtccat catctgtctt gggttaattg gcaactcctt ggtgatccat gtgtgatca aattcaagag catgcgaca gtaaccaact ttttcattgc caatctggct gtggcagatc ttttgggtgaa cactctgtg ctaccgttca ccttaccta taccttaatg ggggagtgga aaatgggtcc tgtcctgtgc cactgggtc cctatgcca gggcctggca gtacaagtat ccacaatcac ctgacagta attggccctg accggcacag gtgcctgctg taccacctag agagcaagat ctccaagcga atcagcttcc tgattattgg cttggcctg ggcacatcag cctgtcctg agtccccctg gcatcttcc gggagtattc gctgattgag atcatcccg actttgagat tgtggcctgt actgaaaagt ggcctggcga ggagagagc atctatggca ctgtctatag tctttctcc ttgtgatct tgtatgttt gccctgggc attatcat tttcctacac tcgcatttg agtataattga agaaccatgt cagtcctgga gctgcaaatg accactacca tcagcaagg caaaaaacca ccaaatgtct ggtgtgtgtg gtggtgtgtg ttgcggtcag ctggctgct ctccatgct tccagcttgc cgttgacatt gacagccagg tccctggacct gaaggagtag aaactcatct tccagtggt ccacatcac gccatgtgct ccacttttgc caatccccct ctctatggtt ggtgaacag caactacaga aggtcttcc tctcgccctt ccgctgtgag cagcggttgg atgccattca cctgaggtg tccgtgacat tcaaggtcaa aaagacctg gaggtcagaa agaacagtgg cccaatgac tctttcacag aggtaccaa tgtctaagga agctgtggtg tgaatatgta tggatgaatt ctgaccagag ctatgaattc ggtgatggc	

201	3404	Neuropeptide NP_000901.1 Y Receptor Type 2	<p> ggctcacaag tgaaaactga ttccccatt taaagaagaa gtggaatctaa atggaagcat  ctgctgttta attcctggaa aactggctgg gcagagcctg tgtgaaaata ctggaattca  aagataaggc acaaaaatgg ttactttaac agttggtgg gtagtaggtt gcattatgag  taaaagcaga gagaagtact tttagattatt ttccctggagt gaagaaaact tgaacaagaa  attggtatta tcaagcact gctgagagac ggtgggaaaa taagttagct ttcaaatcac  gttaggacct ggattgagga ggtgtgcagt tcgctgcctcc ctgcttggt tatgaaaaca  ccactgaaca gaaatttctc caggagagcca caggctctcc ttcatcgcat tttagatttt  ttgttcattc tctagacaaa atccatcagg gaatcctgca ggaacagatt gccaaactata  cgaatggctt cgaggagata aactgaaatt tgctatataa ttaatatattt ggcagatgat  aggggaactc ctcaacactc agtgggcca ttgttcttaa aaccaattgc acgtttggtg  aaagtttctt caactctgaa tcaaaagctg aaattctcag aattacagga aatgcaaac  atcatttaat ttctaatttc aagttacatc cgctttatgg agatactatt tagataacaa  gaatacaact tgatactttt attgtttac ctttttgaac atgtatgatt tctgttgtta  tttacotttt taaacagata aatattttt ttcatattta gtagagcga atctaattt  aatctaactc tttaggagta tatttcagag aaattccaag cacaccagta tgaccatcct  tatttcagaa atgacaatgc atagaggaaa agtaatatgt gcaaaagctc cgaagaggat  ggttaagtaa agacttaggt taccagatc aggtttcgt ttttgatgt aggtagctct  actgcctcct cttaaaacca acaagagaaa gagagactgg ctgcaaaact ttagaagaa  tggtctcgaa taggttctct gggaggaatc ccgaggaat agacgtgct gctctgctga  ttgtctccac tctctgttt tgctctacc cactaatcca gcctggagg ctctgggcat  tagcggaagg cttaccaca aggagacagg agcagatatt ccataggcat gcgtcctag  tggcacgagt ggcttgggtc aggatcaaa agtgaaggat tcggaagtca gctatctgga  gagagagaga gattgtgttt tattegttc ccatagcttt cctatcctat ccctatccta  gcttttaacc tgagccagag ctcactacac aggttccctg ctatcgagtc tgaatctgca  ctactcaact tataaactgt ctgcagacac ctgttaggga aattgctgat catggcgggc  aggatctgaa ctgcctttac cttctgttt ggagcacagg gaccgcccag cttagaggagc  accagcgac tgcgcccag cctggggcga ggtgctggag gattgttct cggtgcaatc  ctgctggcgc ttctccggg ttctgcgag atccagctcc ccatctctgc tctacacac  acaaaagaaa acaactctcg attggaagt ttggaatttt ctacagccct acgaggcgcg  gggattctcc agccccgcc ctctccccc cagcctgagg tctccttcgc tcgctgcct  tgctagggac cgcagtcct cagcgcgagc tgggtctgtc cgccccgct ttgcctcgc  ctttcccg ggcgatttg gtgaagtcgg cctcaagtc aggaggtctg tcttcgcccg  gccagctctc </p>	<p> IDSTKLEI VQ VVLIAYCSI P  TLCLPFTLY TLMGEWKMGP  SKRISFLIIG LAWGISALLA  LSSLLILYVL PLGIISFSYT  WLPPLHAFOLA VDIDSQVLDL  RCEQRDLAIH SEVSVTFKAK  NYRKAFLSAF  VCVVVFEAVS  NPLLYGWNNS  V  PNDSTFEATN </p>	Homo sapiens
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202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacaccc ctacccctct ggccttgctg ctccaaaaat ctccacaagg tgaaaaacaga A agcaaacccc tgggcacccc atacaacttc tctgaacatt gccagatttc cgtggacgtg atggtcttca tctgcacttc ctacagcatt gagactgtcg tgggggtcct gggtaacctc tgccctgatgt gtgtgactgt gaggcagaag gaaaaagcca agctgaccaa cctgctttatc gccaaacctgg ccttctctga cttcctcatg tgccctctct gccagccgct gaccgccgtc tacaccatca tggactactg gatctttgga gagacctctc gaaagatgtc ggccttcac cagtgcattg cgtgacgtg tccatcctc tgcctgctcc tgcctggccct ggagaggcat cagctcatca tcaaaccaac agcctggaag cccagcatct cacaggccta cctggggatt gtgctcatct gggtcattgc ctgtgtctc tccctgccc tccctggcaa cagcatcctg gagaatgtct tccacaagaa ccaactcaag gctctggagt tccctggcaga taagtggtc tgtaccgagt cctggccact ggctcaccac cgcaccatct acaccacct cctgctctc ttccagttact gctccact ggccttctatc ctggtctgtt atgcacgcat ctaccggcgc ctgcagaggc aggggcgcgt gtttcaaac ggcacctaca gcttgcgagc tgggcacatg aagcagggtca atgtggtgct ggtggtgatg gtggtggcct tggcctgct ctggtgcct ctgcatgtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacggg aacctcatct tcttagtgtg ccacttgctt gccatggcct ccacctgct caaccatc atctatggct ttctcaaac caactcaag aaggagatca aggcctggt gctgacttgc cagcagagcg ccccccctga ggaagtggag catctgccc tgtccacagt acatacgaa gtctccaaag ggtccctgag gctaagtggc aggtccaatc ccatttaa MNTSHLLALL LPKSPQGENR SKPLGTYNF SEHQDSVDV MVFVTSYSI ETVGVGLGNL P CLMCVTVRQK EKANVTNLLI ANLAFSDFLM CLLCQPLTAV YTIMDYWIFG ETLCKMSAFI QCMSVTVSIL SLVLVALERH QLIINPTGWK PSISQAYLGI VLIWVACVL SLPFLANSIL ENVEHKNHSK ALEFLADKVV CTESWPLAHH RTIYTFELL FOYCLPLGFI LVCYARIYRR LQRQGRVFHK GTYSLRAGHM KQNVVLVVM VVAFVILWLP LHVFNSLDWH HHEAIPICHG NLIFLVCHLL AMASTCVNPF IYGFINTNFK KEIKALVLTQ QQSAPLEESE HPLSTVHTE VSKGSLRLSG RSNPI	Homo sapiens
203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	gaaaggctat cggtaacaac tgacctgcca caaagttaga agaaaggatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcgga atcttgattt ccagctctgg gatgactata aaagcagtgt agatgactta cagtattttc tgattgggct ctatacattt gtaagtcttc ttggctttat ggggaatcta cttatttttaa tggctctcat gaaaaagcgt aatcagaaga ctacggtaaa cttctcata ggcaatctgg ccttttctga tatcttggtt gtgctgtttt gctcaccttt cacactgacg tctgtcttgc tggatcagtg gatgtttggc aaagtcatgt gccatattat gccttttctt caatgtgtgt cagtttttgg tccaacttta attttaatat caattgccat tgtcagggtat catatgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctcccc ttccagtgtt tcaagctctt gtggaacttc aagaacatt tggttcagca ttgctgagca gcaggatttt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcagtat attctgacct tagtttgtct tactgttaag catacaaagt tctgcagaag tataagctgt ggattgtcca aaaaagaaa cagacttgaa gaaaatgaga tgatcaactt aactcttcat ccatccaaa agagtgggcc tccgttgaaa ctctctggca gccataaatg	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5		Homo sapiens

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	MDLEIDEYN KTLATENNTA ATRNSDFPW DDYKSSVDDL QYFLIGLYTF VSLLGFMGNL P	gagttattca ttcatcaaaa aacacagaag aagatatagc aagaagacag catgtgtgtt acctgctcca gaaagacctt ctcaagagaa ccactccaga atacttccag aaaactttgg ctctgtaaga agtcagctct ctctatccag taagtcata ccagggtcc ccaattgctt tgagataaaa cctgaagaaa attcagatgt tcatgaattg agagtaaaac gttctgttac aagaataaaa aagagatctc gaagtgtttt ctacagactg accatactga tattagtatt tgctgttagt tggatgccac tacacctttt ccatgtggtg ttgcatgtgt ccatgtttt atgacaatct tatttcaaat aggcatttca agttggtgtg ttgcatgtgt cattgtgttg gcatgatgtc ctgtgtctt aatccaattc tataatggtt tcttaataat gggattaaa gctgatttagt gtcccttata cactgtctc atatgtaata attctcaactg ttt	Homo sapiens
206	3408	Neurotensin Receptor Type 1	NM_002531	LILMALMKR NQKTTVNFLI GNLFSDILV VLFCSPTLT SVLLDQWMFG KVMCHIMPFL QCVSVLVSTL ILISIAIVRY HMIKHPISN LNANHYFLI ATVWTLGFAL CSPLPVFHSI VELQETFGSA LLSSRYLCVE SWPSDSYRIA FTISLLLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLTLH PSKSGGPQVK LSGSHKWSYS FIKKHRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SOLSSSKFI PGVPTCFEIK PEENSVDHEL RVKRSVTRIK KRRSVFYRL TILILFAVS WMPLHLFHV TDENDNLISN RHFKLVYCIC HLLGMSCCL NPILYGLNN GIKADLVSLI HCLHM	tcaagctgc cccgcgcgc cgcagcgcgc cgtggcgctg tctcggggg cctggggaac A cgcgcggtt ggagatcgtg gccacttga acccgtggca agcgcgagc cggagacag cccgaggaac cagcggttct ggagctagga gccggaagct gggagtcagg aggagagcgg agcccgagc cgggagccg gggcgcgctg tctgggtctg gcgttcccg actggagcgg gcgccgctg gtcttgcga cgcgcctcc cctgggctcg cgttcacgg tccccgctg agacgcgcc actcctgcc gacttccag cccggagcg gccggacaga gccgcgact ccagcgcca ccatgcgct caacagctcc gcccgggaa ccccgggcac gccggcgcc gaccttcc agcggcgca gcccgactg gaggagcgc tgcggcccc ggcctcgcc aacgcttgg gcaacgcgt gccgctgc gccgagcgt ctcgagcgt ccagcagcga gctggactg ggcacggtg gcaacacggt gacgcgttc accgctggt accgctggt cctcggtgtg ctgcagagca cgggtgcatta caacctggc accctggcg agcctggcg tctccgacct gctcaccctg ctgctggcca tgcctgtgga cctgtacaa ttcacttgg tgcaccacc cttggccttc ggcgacgcg gctgcgcgg ctactactc ctgcgcgac cctgcacota cgcacagccc ctcaacgtg ccagcctgag tgtggagcgc tactggcca tctgcaccc ctcaaggcc aagacctca tgtccggaag ccgcaccaag aagttcata gcgcctctg gctgcctcg gccctgctga cgggtccctat gctgttacc atggcgagc agaaccgag gccgacggc cagcacgcg cgggctggt gtgcacccc accatccaca ctgccaccgt caaggtcgtc atacaggtca acacctcat gtcttcata tccccatgg tggtcactc ggtcctgaac accatcatg ccaacaagct gaccgtcatg gtacgcagg cggccgagca gggccaaagt tgcacggtg gggcgagca cagcacctc agcatggca tgcagcctg cagggtccag gccctgcgc acggcgtcg cgtctacgt gcatggta tgcctttgt ggtctgttg ctgccctacc acgtggcg cctcatgtc tgctacatc cggatagca gtgactccg ttcctctatg acttctacca ctactctac atggtgacca acgcactctt ctacgtcagc	Homo sapiens

tccaccatca acccatcct gtacaacctc gtctctgcca acttccgcca catcttctctg  
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gagcttctgt gccagccag gatgtccaga ggtcggtgca gccctatcc ctgctcagga  
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gactcagagc cagacaggc agcctcagac ccttctctgg ggtccttga ccttgggcca  
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ctggatgaga ctgtcctgga ggtaccacc cggaaacagac agaagcgtgt cctcaggat  
ggtgtctga gaggggag agtggatgcc ccactgccct agaccctgg tagacgtggg  
gtctctgggg cgggtctgt ggtgtgact gaagtgggt tcccgttga tgtcttgatg  
ctctatctg tgcacttacc gtaggtaggg acagtgtcc atgcaccaca gacacacca



207	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctagcttgccg gccaggtcat gatgtggccc cggaagctgg ccctgggtgc catgagtgcc tcggtcatgg agtcggagc cctgagccg gccctgggtg acggcacagc cctcacagct caaacgccc ccccaactcc caccatctgc agtggtgaa aacaacccc gttgatctct caataaaggt ggccgaagg cctcgatgtg g MRLNSSAPGT PGTAAADPFG RAQAGLEAL LAPGFNASG NASERVLAAP SSELVDNFDI P YSKVLVTAVY LALFVVGTVG NTVTAFTLAR KKSLSQLOST VHYHLGSLAL SDLLTLLAM PVELYNFIWV HHPWAFGDAG CRGYFFLRDA CTYATALNVA SLSVERYLAI CHPFKAKTLM SRSRTKKFIS AIWLASALLT VPMLFTMGEQ NRSADQHGAG GLVCTPTIHT ATVKVVIQVN TFMSFIFPMV VISVLNTIIA NKLTVMVRQA AEQGOVCTVG GEHSTFSMAI EPGRVQALRH GVRVLRVAVI AFVVCWLPYH VRRLMFCYIS DEQWPPFLYD FYHYFMYVTN ALFYVSSTIN PILYNLVSAN FRHIFLATLA CLCPVWRRRR KRPAFSRKAD SVSSNHTLSS NATRETLV cctgctctgc acctgtcgtc gactgccagc cggtgaggg cggggggtctc cacggtggtc A ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgcagg cagtggcatg gagccctctc tcccgcgcc gttctgggag gttatctacg gcagccacct tcagggcaac ctgtccctcc tgagccccc aaacagttctg ctgccccgc atctgctgct caatgccagc cacggcgccct tctgcccc cgggtcaag gtccacctcg tggggctcta cctggccgtg tgtgtcggag ggctcctggg gaactgctt gtcatgtacg tgcctctcag gcacaccaaa atgaagacag ccaccaatat ttacatctt aaactggccc tggccgacac tctggtcctg ctgacgtgc ccttcaggg caggacatc ctctggggt tctggccgtt- tgggaatgg ctgtgcaaga cagtcatgac caggactac taacacatgt tcaccagcac cttcacctca actgccaatga gtgtggatcg ctatgtagcc atctgccacc ccatccgtgc cctcgacgtc cgcaagtcga gaaagccca ggctgtcaat gtggccatct gggccctggc ctctgtgtc gggtgtccc ttgccatcat gggtcgggca caggtcgagg atgaagagat cgagtgcctg gtggagatcc ctaccctca ggtactactg ggcccggtgt ttgccatctg catctctc ttctccttca tgtccccgt gctcgtcatc tctgtctgct acagcctcat gatccggcgg ctccgtggag tccgctgct ctggggtccc cgagagaagg accggaacct gcggcgcatc actcggctgg tctgtgtgt agtggctgtg ttctgtgtgt gctggagccg tgtccaggtc ttctgtctgg cccaagggtc gggggttcag cgagcagcg agactgccc ggcattctg cgcttctgca cggccctggg ctacgtcaac agctgcctca acccactct ctacgccttc ctggatgaga actcaaggc ctgctcccgc agttctgct gtgcattctg cctgcccgg gacgtgcagg tgtctgaccg cgtggcagc atgtccaagg acgtggccct ggcctgcaag acctctgaga cgggtaccgg gcccgcatga ctaggcgtgg acctgcccac ggtgctgtc agcccgca ga cccatctac gccaacaca gactcacac aggtcactgc tcttagggc gacacacct gggccctgag cctcagagc ctgggatggg cttttccctg tgggccaggg atgtctggtc ccagagaggg acctagtac atcatggag aggtcaaaag attagggcca cctccatgac ccagacaga ctaagctgc cctcctggt ggagggcgt tactggagcc cgtcccc gacctacctg gaagcagctg acatgctggt gacggccgt gactggagcc accctgggt cctccccgtg cttcatgtga ctttggcct ctctgctct gcttggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcactct gtccccca tgtgtgtgt gctgtttgca tggcagggt ccagctgct cagccctgt gactctct caggcagct ggacaggctt ggcacggccc ggggaagtga gcaggcagct tttctttggg tggggacttg	Homo sapiens
208	Opiate Receptor- Like 1 (OPRL1)	NM_000913	cctgctctgc acctgtcgtc gactgccagc cggtgaggg cggggggtctc cacggtggtc A ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgcagg cagtggcatg gagccctctc tcccgcgcc gttctgggag gttatctacg gcagccacct tcagggcaac ctgtccctcc tgagccccc aaacagttctg ctgccccgc atctgctgct caatgccagc cacggcgccct tctgcccc cgggtcaag gtccacctcg tggggctcta cctggccgtg tgtgtcggag ggctcctggg gaactgctt gtcatgtacg tgcctctcag gcacaccaaa atgaagacag ccaccaatat ttacatctt aaactggccc tggccgacac tctggtcctg ctgacgtgc ccttcaggg caggacatc ctctggggt tctggccgtt- tgggaatgg ctgtgcaaga cagtcatgac caggactac taacacatgt tcaccagcac cttcacctca actgccaatga gtgtggatcg ctatgtagcc atctgccacc ccatccgtgc cctcgacgtc cgcaagtcga gaaagccca ggctgtcaat gtggccatct gggccctggc ctctgtgtc gggtgtccc ttgccatcat gggtcgggca caggtcgagg atgaagagat cgagtgcctg gtggagatcc ctaccctca ggtactactg ggcccggtgt ttgccatctg catctctc ttctccttca tgtccccgt gctcgtcatc tctgtctgct acagcctcat gatccggcgg ctccgtggag tccgctgct ctggggtccc cgagagaagg accggaacct gcggcgcatc actcggctgg tctgtgtgt agtggctgtg ttctgtgtgt gctggagccg tgtccaggtc ttctgtctgg cccaagggtc gggggttcag cgagcagcg agactgccc ggcattctg cgcttctgca cggccctggg ctacgtcaac agctgcctca acccactct ctacgccttc ctggatgaga actcaaggc ctgctcccgc agttctgct gtgcattctg cctgcccgg gacgtgcagg tgtctgaccg cgtggcagc atgtccaagg acgtggccct ggcctgcaag acctctgaga cgggtaccgg gcccgcatga ctaggcgtgg acctgcccac ggtgctgtc agcccgca ga cccatctac gccaacaca gactcacac aggtcactgc tcttagggc gacacacct gggccctgag cctcagagc ctgggatggg cttttccctg tgggccaggg atgtctggtc ccagagaggg acctagtac atcatggag aggtcaaaag attagggcca cctccatgac ccagacaga ctaagctgc cctcctggt ggagggcgt tactggagcc cgtcccc gacctacctg gaagcagctg acatgctggt gacggccgt gactggagcc accctgggt cctccccgtg cttcatgtga ctttggcct ctctgctct gcttggcag aacctgggt gggcaggcac ccggaggagg agcagcagct gtgtcactct gtccccca tgtgtgtgt gctgtttgca tggcagggt ccagctgct cagccctgt gactctct caggcagct ggacaggctt ggcacggccc ggggaagtga gcaggcagct tttctttggg tggggacttg	Homo sapiens

209	3452	Opiate Receptor- Like 1 (OPRL1)	NP_000904.1	<p>ccctgagctt ggagctgcca cctggaggac ttgctgttcc cgaactccacc tgtgcagccg  gggccacccc aggagaaagt gtccaggtgg gggtggcag tccctggctg cagaccccga  gctggccctc ggaccgcacc tctgaaggtt ttctgtgtgc tgcacggtgc aggcctcacc  cctgactgca gcttgactct ggcccacacc cccattcccc ttccaggagac cagcgagagg  ccctggccat cctccagcg gtgcaatgaa ctatatgctg tggaccgtca acccagccct  gcttctcagt gtggggcagg tgtctcagga cgaaggccgc gctgaccac atgggcagct  ctgttcacaa agtggaggcc tcttttctct ggtctgact gctctgtttg ggtggagaa  gattctctgg gggtcccccac atcctcccaa ggctccctc acagcctctc ctttcttga  agccagaggt cagtggccct gctgtgtgc gggaagctg ttggaagga gaagctggtg  gccacagcag agtctctgctc tggggacgcc tgcctcattt acaagcctca agatgctct  gtgtagggcc tgaagcttgc tgggaacgcc aggatgctt cagacgag ccagcatgag  gggtggggcc tggcagggtc tgcctgagcc aaactgcaa ggctgtggtg gctgtgagga  cactgcgggg gttg</p>	Homo sapiens
210	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NM_000273	<p>atgaccagg caggccggcg gggtctctggc acaccgagc cgcgtccgcg aacacagccc A  atggctccc cgcgcctagg gaccttctgc tgcaccagc gggacgcagc cagcagctc  gtgctgagct tcacgcgcg ggccctccac gcgtctctgc tgggcagcgg cgggtccgcg  ttggcgctgg gccttctgca gctgctgcc ggcgcgcgcg ccgcgggcc ccggtccccc  ggacgctcc cgcggccctc ggccgcctc gtgctggttag gattcccaaa ttttctgac  ggctgcctgg gtatggtgat ccggtccacc gtgctgctg tggcctgctg cttctgcgt ggggagtgcg  agcgtctcgg atatgaacca cagtgccctg ttcgtggtgc tttttgcta tgcagtggat  gcttatctgg tgatccggag atcggcagga ctgagacca tctgctgta tcacatcatg  gcgtggggcc tggccacct gctctgtgtg gaggagccg ccctgctcta ctacctcc  gtgtccaggt gtgagcgggg cctggaccac gccatcccc actatgtcac catgtacctg  ccctgctgc tgggtctcgt ggcaacccc atcctgttcc aaaagacagt gactgcagtg  gcctctttac ttaaagggaag acaaggcatt tacacggaga acgagaggag gatgggagcc  gtgatcaaga tccgattttt caaaatcatg ctggttttaa ttattgttg gttgtcgaat  atcatcaatg aaagcctttt attctatctt gagatgcaaa cagatatcaa tggaggttct  ttgaaacctg tcagaactgc agccaagacc acatggttta ttatgggaat cctgaatcca  gcccagggat ttctctgtc ttggccttc tacggctgga caggatgcag cctgggtttt  cagtcctcca ggaaggagat ccatgggaa tcaactgacca cctcggctgc tgaggggct  caccatccc cactgatgcc ccatgaaaac ctgcttccg ggaaggtgct tcaagtgggt  gggcagactt ctgacgaagc cctgagcatg ctgtctgaag gtctgtatgc cagacaatt  gaaattcaca ctgcaagtga atcctgcaac aaaaatgagg gtgacctgc tctcccaacc</p>	Homo sapiens

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NP_000264.1	catggagacc tatgaagggg abgtgctggg ggtccagacc ccattctcct cagactcaac aattcttggt ctttagaact gtgttctcac cttcccaaca ctgcactgcc gaagtgtagc ggcccccaaa ccttgctctc atcacacagct agagcttctt ccgaagggc ctttaggata ggagaaggg ttcatgcaca cactgtgtgag aatggaagag cccctccag accactctac agctgctcta gcttagttg ccaataggaa gtttctgag gctggctgta aagtaagtgt aaggtccaca tccctgggga agtagttaaa taaatagtt atgactg LALGLQLLP GRRPRTQP MASPLGTFC CPTRDATQL VLSQPRAFH ALCLSGGLR P SVSDNMHTEI WPAAFVGS A MWIQLLYSAC FWLFCYADV AYLVIRRSAG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLVLVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGGS LKPVRTAAKT TWFIMGILNP AOGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSPIMPHEN PASGKVSQVG QOTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt acctggagc ctacaatgag aggtatttca aatgagtgga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaaa acacttgggc cacttcaaga cgacaaacgc tcactgggca aaacacctc actgaaaaa gacctcatat tatgcaaaaa aaatcttaag aggcctctgc cttcagaagt tacaagatga tcaattcaac ctccacacag ctccagatg aatcctgctc tcagaacctc ctgatcactc agcagatcat tccgtgtctg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgcaggatg gatattcttt tacgtgcccc gctctaagag ttcatcacc tatctcaaga acattgttat tctgacttt gtgatgagcc tgaactttcc ttcaagatc cttgtgtact caggccttgg tccctggcag ctgaacgtgt ttgtgtgcag ggtctctgcc gtgctcttct acgtcaaat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcctctttgg acttctttca tccagtcatg gagttaacgc aaacttctgt cagtgatagt atggatgctc atgctctctc ttgtgttcc aaatattatt ctcaacaacc agagtgttag ggaggttaca caaataaaat gtatagaact gaaagtgaat ctgggacgga agtggcaca agcatcaaac tacatcttcg tggccatctt ctggattgtg ttcttttgg taatcgtttt ctatactgt atcacaaaaa aaatctttta gtcccacctt aagtcaagtc ggaattccac ttcggtcaaa aagaaatcta gcgcaacat attcagcatc gtgtttgtgt tttttgtctg tttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccc aagctcata cagctgccag tcaaaagaaa tcttgcgga tatgaaagaa ttcaactcgc tactatctgc tgcaaatga tgcttgacc ctattattta ttctttcta tgcagccgt ttagggaat cttatgtaag aaatgcaca ttccattaaa agctcagaat gacctagaca ttccagaat caaagagga aatacaaac ttgaaagcac agatactttg tgagttctta cctcttcca aagaaagacc acgtgtgcat gttgtcatct tcaattacat aacagaaatc aataagatat gtgccctcat cataaatatc atctctagca ctgccatcca atttagttca ataaaattca aatataagt tccatgcttt ttgttaacat caaagaaac ataccatca gtaatttctc taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct attatataa aataagttaa agttataac cactagtctg gtcagttaat gtgaaattt aaatagtaaa taaacacaaa cataatcaaa gacaactcac tcaggcatct tctttctcta aataccagaa	Homo sapiens

[illegible]

atcgtgctcg ctacctgcta cggccttata agcttcaaga tctggcagaa cttgcggctc  
aagaccgtg cagcggcggc ggccgaggcg ccagagggcg cggcggctgg cgatggggg  
cgcgtggccc tggcgcgtgt cagcagcgtc aagctcatc ccaaggccaa gatccgcacg  
gtcaagatga cttcatcat cgtgctggcc gcgcccaag aagcctcgc cttcatcatc  
gtcagatgt ggacgctcgt caacagctgc ggcctcgtc ggcctcgtc ggcctcgtc  
gtcatgctcc tggccagcct caacagctgc ggcctcgtc ggcctcgtc ggcctcgtc  
ggccacctct tccacgaact cgtgcagcgc ttcctgtgct gctcggccag ctacctgaag  
ggcagacgccc tgggagagac gagtgcagc aaaaagaca actcgtcctc ctttgtcctg  
agccatcgca gctccagcca gaggagctgc tccagccat ccacggcgtg acccaccg  
caggccagg gctgcagcct gaggctcagg ctgtgctggc ataagtgcct tgcctcctag  
tgatggcgta tgtttgtgta taaggtaacct atcagtttgt atcctcccc tcttgggg  
ggcttcagtg ggttgagag tggcctccat gatgaagat gataggggac tcagccatca  
gacaacaccc tggcctccta cactacttc taccacctg aacctcgtc tgcctgggc  
agtgaagtggc ttgtttttc tctggacct gtaatttcac tccagtatat ttttactct  
tcattctggg atattgtgaa aagcggtaaa tataggattg tgaccaatt ggtcaggaa  
gtccagtgtt ctggacttgg ggttaagcagt ggggttggga cctcagatgg gaagggtggt  
gtcaagatcc tctgacctc aaagtgtatt tgccttaag cgaacaaatg ctggggtcct  
tggggaccag cttgtcagag ggtagcccta agagaagggg attaccttgt aagacctct  
ggcgcagtgg acctattaga acttgggtta aaaaatttta aagaagtaatt gtttaagaag  
catttggaa agaaaaagaa ataaatgtat ccagatagga aaagaagaag taaaactatt  
tgcagatgac acagtttgt atatagaaa tcctaaggaa ctcacacaca cacacacaca  
cacacacgca cacagctatt agaactaata agcaagttcc gaaggtttc agatatacag  
atcaatatac aaaaatgaat tgtatttctt tatactagca acaacaata tgaaacgaa  
gttaataat tccatttata ataccatcag aaagaataaa ataggaaatca acttaacaaa  
acaagtgcga gactgaaaac tacaaaattg gaaagaaatt aaagaaggct taaataaatg  
gaaagacatc ctgtgttcat ggatcagact tagtattgtt aagatggcaa tactatccta  
actgacatgc agattcagtg caatccttat gaaaatcata gctggctttt ttacagaaat  
tgataagcta gtcccaaaat tcataaagaa cccagatatac caaataagcc  
ttgaaaaaga acaaaagtgg tggattcaca cttcctgatt tcataattta cgataaaggt  
aatcagctca gtgtgttact ggtttaaagga tagacatacag gagcagaata aagatcacag  
atatgaacac ttatacttac ggtcaattga ttttgacaa ggttcccaag acaattcaat  
agagaaaagga gagtctttc acaaaatggc accgagacaa tgatatgcaa gtgcaaaaga  
atgagggttg acccttactc acactatgtg caaaaatcaa ctcaaaacgc atccaagatc  
taaatataag agctgaaact ataaaatcctt agaaagaac ataggcatag atctttgtta  
ccttgaatta ggcagtggtt tcttagatat gataccaaag acacaagcaa ccaatggaaa  
aatagggtaaa ttggacttaa tcaagatttg aagcttttgt gattgaaaag accctatcaa  
gaaggtgaaa agataacctg cagaatggga gaaaatattt gcgagtcata tatatgata  
ggggttgta tctggaatat ataaaact atataaac acaataaagg agaaaaataa  
atcaatttaa aaaaatggct aacggttga atagacattt ctccaaagaa gatagcaaa  
tggctactaa gcacatgaaa aatactcaac attattattc attagggaaa tgcaagtcaa  
aatcacaatg agattccagt ttacaatcac taggatggct acaataaaaa gatggacaag

215	3582	Oxytocin Receptor	NP_000907.1	<p>aacgagtgtc ggtgaggatg tagagaaact gtagaaaatt taattgttg gtgggaatgt  aatgtgtgca cctgctttga aaaacagttt ggcagtacct caaaaagttt aacgtagagt  gaccatatga cccaggaatg ccaactcctag gtatttacc aagagaaatg aaaacgtaca  tacacacaaa aacttgtaca ccaatgttca tagcaacatt atttgaata gccaaaagt  ggaacaacc caaatgtcta ccaactgatg aatgggaaat aaaaatgtgt ctgtccacgc  aatggaacat tattagatct taaaaagaaa tgaagtactc acacatgcca caacatggat  gagccttgaa aacttgctaa gtgaaagaa ggcagtgcaa aagccacat attgtctgac  tgcattgaaa tgcaatgtct aaaaaggacg aacttatata gagtgaatat agattagcgt  ttgccagggc ctggaggctg tgagagatga ggcatactga ctaagggttt ggggtttctt  tttcgggtga tgaaaaatgtt cgaatttagt ggtgattgtg cagcattttg agaattgact  aaaaaccaat gaactttaaa aaataaaaat aaacaaa</p> <p>MEGALANWS AEAANASAP PGAENRTAG PPRNEALAR VEVAVLCIL LLALSGNACV P  LLALRTRQK HSRLEFFMKH LSIADIVAV FQVLPQLWD ITRFYGPD L LRLVKYLQV  VGMEASTYLL LMSLDRLA ICQPLRLRR RTDRLAVLAT WLGLVASAP QVHIFSLREV  ADGVFDCWAV FIQPWGPKAY ITWITLAVI VPVIVLATCY GLISFKIWQN LRLKTAASAA  AEAPEGAAAG DGRVALARV SSVKLISKAK IRTVKMTFII VLAFIVCWT P FFFVQMWWSVW  DANAPKEASA FIIVMLLASL NSCCNPWIY LFTGHLFHEL VQRFLLCCSAS YLKGRLGET  SASKNSSS FVLSHRSSSQ RSCSQPSTA</p>	Homo sapiens
216	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	NM_002564	<p>cgggcacgag caccgcgaga ggagaagcgc agcgcagtgg cgagaggagc ccctgtggc A  agcagcacta cctgcccaga aaaaatgctgg aggtgtggcg tggccccagg cctgggggacc  tgttttctct gtttcccgca gagtccctcg cagcccggtc caggtccagg cgtgtgcatt  catgagttag gaaccgtgc aggcgtgag cactctgacc tggagagcag gggctgtgtca  gggagatggc agcagacctg ggcctctgga atgacacct caatggcacc tgggatgggg  atgagctggg ctacaggtgc cgcttcaacg aggaactcaa gtacgtgtg ctgcctgtgt  cttacggcgt ggtgtgcgtg cttgggctgt gtctgaacgc cgtggcgctc tacatcttct  tgtgccgctt caagacctgg atgcgtcca ccaatatat gtccacctg gctgtgtctg  atgcactgta tgcggcctcc tgccagtgc tggctctatta ctacgcccgc ggcgacct  ggcccttcag caggtgtctc tgcaagctgg tgccgttctt cttctacacc aacctttact  gcagcatcct ctctctcacc tgcatcagcg tgcaaccgtg tctggcgctc ttacgacctc  tgccgtccct gcgctggggc cgggcccgct acgctcgccg ggtggccggg gccgtgtggg  tgttgggtgt ggcctgccag gccccgtgc tctactttgt caccaccagc gcgcggggg  gcgcgtaac ctgccacgac acctggcac ccgagctctt cagccgcttc gtggcctaca  gtcagtcct gctgggctg ctcttcgagg tgccttttgc cgtcctctt gtctgttacg  tgtctatggc tcggcgactg cttaagccag cctacgggac ctccggcgcc cctccatagg  ccaagcgcaa gtccgtgccc accatcgccg tgggtgtggc tgtcttgcct cctgtcttcc  tgccattcca cgtcaccgc acctctact actccttccg ctccgtggac ctcagctgcc  acacctcaa cggcataaac atggcctaca aggttaccgc gccgtggcc agtgcataca  gttgcttga cccgtgtct tacttcttgg ctgggcagag tgcgtacgc ttgcccag  atgccaaagg acccactggc cccagccctg ccaccccgcc tgcgcagag cttggcctgc  gcagatccga cagaactgac atgcagagga taggatgtgt gttgggcagc agtgaggact  tcaggcggac agagtccacg ccggtgtgga gcgagaacac taaggacatt cggctgtagg</p>	Homo sapiens

217	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	NP_002555.1	agcagaacac ttcagcctgt gcaggtttat attggaagc ttagaggac caggacttgt gcagacgcca cagtctccc agatatggac catcagtac tcatgtgga tgaccccatg ctccgtcatt tgacaggggc tcagatatc cactctgtg tcacagatca actgttccca taaccctag tcatcgttt tggtataag ttgggggaat taagtttcaa gaaaggcaag agctcaaggt caatgacacc cctggcctga ctcccatgca agtagctggc tgtactgcca aggtacctag gttggagtcc agcctaata agtcaaatgg agaacaggc ccagagagga aggtggctta ccaagatcac ataccagagt ctggagctga gctacctggg gtgggggcca agtcacaggt tggccagaaa accctggttaa gtaatgagg gtgagtttgc acagtgtct ggaatggact ggtggccacg gtggacttag ctctgaggg taccctccag ccaagagatg aacatctggg gactaatatc atagacccat ctggaggctc ceatgggcta ggagcagtg gagctgtgtaa cttatactaa aggttgtgtt gcctgctaaa aaaa MAADLGPWND TINGTWGDE LGYRCRNED FKYLIPVSY GVCVLGLCL NAVALYIFLC P RLKTNWASTT YMEHLAVSDA LYAASLPLLV YYYARGDHP FSTVLCKLVR FLEYTNLYCS ILFTICISVH RCLGLRPLR SLRWGRARYA RRVAGAWVL VLACQAPVLY FVTSARGGR VTCHDTSAPL LFSRFVAYSS VMLGLLEFVP FAVILVCYVL MARLLKPAY GTSGLPRAK RKSVRTIAV LAVEFALCFPL FHVTRTLAYS FRSLDLSCHT LNAINMAYKV TRPLASANSC LDPVLYFLAG QRLVRFARDA KPPTGSPSPAT PARRRLGLRR SDRTDMQIRIG DVLGSSEDFR RTESTPAGSE NTKDIRL	Homo sapiens
218	3595	Purinergic Receptor P2Y1	NM_002563	ccccctccc cggggctcca gttcgccctgc tccctccgc tcgctggctt ttccgatgct A tgctgcgccc ctggccgcgc ctgcccctctc gccgcctcct accctcggg gccgcgcct aagtcgagga ggagagaatg accgaggtgc tgtggccggc tgtccccaac gggacggacg ctgcctcctt ggcgggtccg ggttcgtcct gggggaacag cacggtcgc tccactgccg ccgtctctc tcggttcaaa tgcgccttga ccaagacggg ctccagttt tactacctgc cggctgtcta catcttggtt ttcatcatcg gcttctggg caacagcgtg gccatctgga tgttctgctt ccacatgaag ccctggagcg gcatctcct gtacatgttc aatttgctc tgcccgactt cttgtactgt ctgactctgc cagccctgat cttctactac ttcaataaaa cagactggat cttcggggat gccatgtgtt aactgcagag gttcatcttt catgtgaacc tctatggcag catcttggtt ctgacatgca tcagtgccta ccggtacagc ggtgtggtgt acccctcaa gtccctgggc cggctcaaaa agaagaatgc gatctgtatc agcgtgctgg tgtggctcat tgtggtggtg gcgactctcc ccatcctctt ctactcaggt accggggtcc gcaaaaaca aacctacc tgttacgaca ccacctcaga cgagtacctg cgaagtattt tcatctacag catgtgcac accgtggcca tgttctgtgt cccctgggtg ctgattctgg gctgttacgg attaattgtg agagctttga tttaaaaga totggacaac tctcctctga ggagaaaaac gatttacctg gtaateattg tactgactgt ttttgcgtg tcttacatcc ctttccatgt gatgaaaaac atgaacttga gggcccggtt tgattttcag accccagcaa tgtgtgcttt caatgacagg gtttatgcca cgtatcaggt gacaagaggt ctagcaagtc tcaacagttg tgtggacccc attctctatt tcttggcggg agatacttcc agaaggagac tctcccgagc caaaggaaa gcttctagaa gaagtggagg aaatttgcaa tccaagagtg aagacatgac cctcaatatt ttacctagat tgaagcagaa tggagatata agcctgtgaa ggcacaagaa tctccaaaca cctctctgtt gtaatatggt aggatgctta acagaatcaa gtacttttcc cctctttaac ttctagtgtt agaaaaaaat caaaccaaga aaatagtgag	Homo sapiens

219	3595	Purinergic Receptor P2Y1	NP_002554.1	<p> ttaaataaat aatagaagta gaaatgccc catccacact tagcttggtt ggggttgctt  tcacagtctc tctctcttct gactagaagt atgtataata aaacaatact acctagttaa  acatttactt tctcttttgc ctttaaaatg tgcagggttt tctgttttaa gtgtgtgtgc  acatgagtac tggggctgtt tttgatatta gtaattctc taagaaaact agccccctgc  aacttgagtt tgtggtttat ctagccttta ttgtttttt aaatccaca gtaggataaa  aaaatcata ttctcagaaa tatctagcat ggtataaac aaacactaa actcatcagt  tcatccggca tcagatcaat ggtactctga gcgggtgtt ttttcagt tcttataagc  atagatgata gttgactgag tttcttttag gcattgaata gacaagtaaa gctaataaat  ttaaagcct gaaaagtgat tgtttccag tttttctg aagaggtctc attatatatt  gggtgctaaa tgtttgatg ggaagcctg catatatatt cgtactgga aatgcattc  aaaataatta aagtgcattg attttcttg taaacacct gagctctct agacatctg  tgataaagag catttacttg cccactgct gtgcaatgcc ttaggacttt gttgtgttc  caggacaagt gttcactcac atctgtaaaa caattttaa gaattgcaaa taaattacag  accaaagatt ggtaaagtc aaataactgt tagtaagtgt aagatatatt gacaggagga  cagtatttca gaaaaggaga ggttgacagt catccacaag gcatagcctc caagtatact  ctcaaatgta tgaagcaact ggggtgggca gaagacattt tagaatgagg gcctttagtt  taaatataag tcatggtgga gaagactctt gcttccacca agtgtttgaa aacacaaaat  acgatataaa aaaaaaaaaa aaaa  cagatataaa aaaaaaaaaa aaaa  MTEVLPAPV NGDAAFLAG PGSSWGNSTV ASTAAVSSSF KCALTKTGFQ FYLPVAVIL P  VFIIIGFLGNS VAIWMFVFM KPWSGISVYM ENLADFLY VLTLPALIFY YFNKTDWIFG  DAMCKLQRFI FHNLYGSIL FLTCISAHRY SGVYPLKSL GRLKKNAIC ISVLWLTIV  VAISPILFYS GTGVRKNKTI TCYDTSDEY LRSFYISMC TTVAMFCVPL VLILGCYGLI  VRALIYKDLD NSPLRRKSIY LVIIVLTFA VSIYFFHVMK TMNLRARLDF QTPAMCAFND  RVYATYQVTR GLASLNSCVD PILYFLAGDT FRRRLSRATR KASRRSEANL QSKSEDMTLN  ILPEFKQNGD TSL </p>	Homo sapiens
220	3596	Purinergic Receptor P2Y5	NM_005767	<p> ctgatgaaag tgcttccaaa ctgaaaattg gactgcctt tacgatggta agcgittaaca A  gctcccactg cttctataat gactccttta agtacacttt gtatgggtgc atgttcagca  tggtgtttgt gcttggttta gataccaatt gtgttgccat atacattttc atctggtcc  tcaaggtccg aatgaaact acaacttaca tgattaaact ggcaatgta gacttgcttt  ttgtttttac ttacccttc aggatttttt actcacaac acggaattgg ccattggag  attactttg taagatttct gtgatgtgtg ttataccac catgtacgga agcattctgt  tcttaacctg tattagtga gatgatctc tggcaattgt ctaccattt aagtcacaaga  ctctaagaac caaaagaaat gcaagattg ttgcactgg cgtgtgggta actgtgatcg  gaggaaagtc accgcgctt ttgttccagt ctaccactc tcagggtaac aatgcctcag  aagcctgctt tgaataattt ccagagacca catggaaaac atatctctca aggattgtaa  tttctatcga aatagtgagg ttttttatt ctctaattt aaatgtaact tgtcttagta  tggtgctaaa aactttaacc aaacagttg caataagtag aagcaaaata aacaaaacta  aggtttttaa aatgattttt gtacatttga tcataattctg tttctgtttt gttccttaca  atatcaatct tattttatat tctctgtgta gaacacaaac atttggttaatt tgctcagtag  tggcagcagt aaggacaatg taccacaatca ctctctgtat tgctgtttcc aactgtgtt  ttgacctat agtttactac ttatcatcgg acacaattca gaattcaata aaatgaaaa </p>	Homo sapiens



221	3596	Puriner Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatgtgtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatttga caatgaatct gctgcctgaa ataaaacat taggactcac tgggacagaa ctttcaag MSDLLFVFTL YNDSFKYTL GCMFSMVFL GLVSNCAIY IFICVLKVRN ETTYMINLA P PFKSKTLRTK RNAKIVCTGV WLTIVGSAP AVFQSTHSQ GNNASEACFE NFPEATWKTY LSRIVFIEI VGEFPIILN VTCSSMVLKT TPKPVTLSRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSIVRTQTF VNCSSVAAVR LMYPIITLCIA VSNCCFDPIV YYFTSDTIQN SIRKMNWSVR RSPDFSEVH GAENFIQHLN QTLKSKIFDN ESAA aaggacagag gaggggccct tcctgtcagc tggctgggag cagaggtggc tttgtctttt A cggagaact ggttctgtgg aatttgtctg tatttcccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt ttctgtctg cctgtcatct ggatagtgtc taaaaatttg caaactgctt tctgtcagt gcttgtctca ttcttcata cactctgat atgtcttca gtttctcat ctgtgcttc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggtgctc cacgagtgg aattgtctc agcacttcac ggactgcaag ggcggagttc aggtgagga ggataacaag acctctgcca gaagaacct tccttgaaca taggaaccc acctggcag gatgggtgag ggacaaatgg acaggccagg cctgggctt gccaccacc acctgtgtct ccatggaaatg ggaacatctg tgcattacc ctgtgctgc cacctgtgta ttggcggtg ctggcggtc accgcgagaa cttcaagcaa ctgtgctgc agatctgac tccccgcgg gccctgaccc gcttgcctgt gaacatctgt gtacacctc aacctgtct tggctgacct gctatatgcc tgcctctgc gcacggccgt gtacacctc aacctgtct atcactggc ctttggcgac ttgcctgccc cctgtctcat ctacaaact gccaaagggtg tgcactggc tgcactcttc ctacactgca gcctgttccg cttcctcttc tatgccaacc tgacaggcag cactctcttc ctacactgca tcagcttcca gcgtacctg ggcatctgcc accgctggc cccctggcac aaagtgggg gcggccgggc tgcctggcta gtgtgtgtag ccgtgtggc tgcctggaca acccagtgcc tgccacagc catcttctg gccacaggca tccagcgtaa ccgcactgtc tgctatgacc tcaggccgccc tgccttggc acctata tgcctatgg catggctctc actgtcatcg gcttctctgt gcccttggc gccctgtgg cctgtactg tctcctggc tgcgctgtg gcggccagga tggcccgcca gagcctgtgg ccaggagagc gcgtggcagg gcggccgca tggccgtggt ggtggctgt gcccttgcca tgaacttct gccctttcac atcccaaga cagcctacct ggcagtgcg tcgacgcccg gcgtccctg cactgtattg gaggccttg cagggcccta caaaggcacg cggccgtttg ccaagtcca cagcgtgctg gacccatcc tcttctactt caccagaag agttccgccc ggcgaccaca tgaactctca cagaaactca cagccaaaatg gcagaggcag ggtcgtctg tctcctagg cctgggcagc cttcatatt gccattgtgt ccggggccacc aggagcccca ccaaccccaa accatgcgga gaattagagt tcagctcagc tgggcatgga gttaatatcc ctacaggac ccagaagctc accaaaact atttcttcag ccccttctct ggccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggtccca gtcagccatg gagcgtggg gaaaccacat taagtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens
222	3597	Puriner Receptor P2Y6	NM_004154	aaggacagag gaggggccct tcctgtcagc tggctgggag cagaggtggc tttgtctttt A cggagaact ggttctgtgg aatttgtctg tatttcccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt ttctgtctg cctgtcatct ggatagtgtc taaaaatttg caaactgctt tctgtcagt gcttgtctca ttcttcata cactctgat atgtcttca gtttctcat ctgtgcttc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca ggggtgctc cacgagtgg aattgtctc agcacttcac ggactgcaag ggcggagttc aggtgagga ggataacaag acctctgcca gaagaacct tccttgaaca taggaaccc acctggcag gatgggtgag ggacaaatgg acaggccagg cctgggctt gccaccacc acctgtgtct ccatggaaatg ggaacatctg tgcattacc ctgtgctgc cacctgtgta ttggcggtg ctggcggtc accgcgagaa cttcaagcaa ctgtgctgc agatctgac tccccgcgg gccctgaccc gcttgcctgt gaacatctgt gtacacctc aacctgtct tggctgacct gctatatgcc tgcctctgc gcacggccgt gtacacctc aacctgtct atcactggc ctttggcgac ttgcctgccc cctgtctcat ctacaaact gccaaagggtg tgcactggc tgcactcttc ctacactgca gcctgttccg cttcctcttc tatgccaacc tgacaggcag cactctcttc ctacactgca tcagcttcca gcgtacctg ggcatctgcc accgctggc cccctggcac aaagtgggg gcggccgggc tgcctggcta gtgtgtgtag ccgtgtggc tgcctggaca acccagtgcc tgccacagc catcttctg gccacaggca tccagcgtaa ccgcactgtc tgctatgacc tcaggccgccc tgccttggc acctata tgcctatgg catggctctc actgtcatcg gcttctctgt gcccttggc gccctgtgg cctgtactg tctcctggc tgcgctgtg gcggccagga tggcccgcca gagcctgtgg ccaggagagc gcgtggcagg gcggccgca tggccgtggt ggtggctgt gcccttgcca tgaacttct gccctttcac atcccaaga cagcctacct ggcagtgcg tcgacgcccg gcgtccctg cactgtattg gaggccttg cagggcccta caaaggcacg cggccgtttg ccaagtcca cagcgtgctg gacccatcc tcttctactt caccagaag agttccgccc ggcgaccaca tgaactctca cagaaactca cagccaaaatg gcagaggcag ggtcgtctg tctcctagg cctgggcagc cttcatatt gccattgtgt ccggggccacc aggagcccca ccaaccccaa accatgcgga gaattagagt tcagctcagc tgggcatgga gttaatatcc ctacaggac ccagaagctc accaaaact atttcttcag ccccttctct ggccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggtccca gtcagccatg gagcgtggg gaaaccacat taagtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWDNGTQQA LGLPPTTCVY RENFKQLLLP PVSVAVLAAG LPLNICVITQ ICTSRRALTR P TAVYTLNAL ADLLYACSLP LLIYNYAQGD HWPFGDFACR LVRFIFYANL HGSILFLTCL SFQRYLGICH PLAPWHKRGG RRAAWLVGVA VWLAVTTQCL PTAIFAATGI QNRNRTVCYDL SPPALATHYM PYGMALTVIG FLLPFAALLA CYCLILACRLC QDGGPAEPVA QERRGKAARM AVVVAFAI SELFPHITKT AYLAVRSTPG VPCTVLEAFA AAYKGTRPEA SANSVLDPIIL FYFTQKKFRR RPHELLQKLT AKWQRQGR	Homo sapiens
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctaccgggc catagtgtca gattgggtgaa ccctgcagc cagcaggcct cctgaaaaaa A aagtcacatgg gtgacagaag attcattgac ttccaattcc aagattcaaa ttcaagcctc agaccagggt tgggcaatgc tactgccaat aatacttgca ttgttgatga ttccctcaag tataatctca atgggtcgtgt ctacagtgtt gtattcatct tgggtctgat aaccaacagt gtctctctgt ttgtctcttg ttcccgcatg aaaaatgagaa gtgagactgc tatttttatc accaatctag ctgtctctga ttgtcttttt gtctgtacac taccttttaa aatatattac aacttcaacc gccactggcc ttitgtgtgac accctctgca agatctctgg aactgcattc cttaccaca tctatgggag catgctcttt ctcaactgta ttagtgtgga tcgtttctctg gccattgtct atccttttgc atctcgtact attaggacta ggaggaaattc tgccattgtg tgtgtcgtgg tgatgatcct agtcctcagt ggcggtattt cagcctcttt gtttccacc actaatgtca acaatgcaac caccacctgc ttggaaggt tctccaaaag tgtctggaa acttatttat ccaagatcac aatatattat gaagtgttg gttttatcat tctctaaata ttgaatgtct ctgtctcttc tgtgtgtcgtg agaactcttc gcaagcctgc tactctgtct caaatggga ccaataagaa aaaagtactg aaactctgtc cagtaacat cactctgtct gtggtatgct ttgtacccta caactctgtc ctctcttgt atgccctggt gcgctcccaa gctattacta attgcttttt ggaaagattt gcaagatca tgtacceat cactctgtgc cttgcaactc tgaactgttg tttagacct ttcatctatt acttcaacct tgaatccttt cagaagtctt tctacatcaa tgcccacatc agaatggagt ccctgtttta gactgaaca ccttgacca caaagccttc ccttcacagt attcaagagg aagttagtga tcaacaaca aataatggtg tgaattcaat gctagaatcc acccttttag tatgagaat gtgttcaggt ccagatatgg ttctctctat aattttctct atgctataaa ctaaagattt gaagctaatg atactgagaa taatgcacca aatccagtc aatacatttg ttgaaaggt aactgtagag tttttattgc tgttttgttc agtaattata ggtcaaatct aattacaaca accaagatgg attgccaaac tcttctgctt ggttggaatt tcatgtatc gcattatcca ggtggcgtagt ggcatttgat aatatagaga tgactttgaa actttcaaaa aggtatttct attccaatga tatttggtaa ttaggttggg cctataaata tagaacaat tcagggtattt ttaaaaaatt gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt ttagcacaaag aatatattta gcctaacatt attaataaga aatgtgtcaa atttttaaca ttggtaaaat atgttatgtg cattttgaa acagaaaaa aattgggttg gcagtacgt gggtgggaag aaaaagaaa ttaacaggat ttacacaatt ataaccacca gcagtgtgag tttaaaaaac ttcgttgttt ttacaccaa ttaaaatttt catgtcaaac ttcaagcca gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa acagggaaag tgtcaataaa aaaacttgag caacaccaac atattttttc ttaaaatgtc acgttatctt cattttggga aactagggtc tataaaatat ttatctctcc tgttatactt tggagcacag cacagccaga aaggggctgc atttgtgcc aggtcaggag caaatgaaa aaaaaataa	Homo sapiens

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	<p>agtaatacta aaaaatcaaa ctataaaccc aaaaacattta ttaaaacctg aattaatcct  ttdtgaggagg aggagtagag atataataacc tgaataatact tattctttct tatcgaattt  tggagcctaa tatagccagg agctgcigaa tttgtgcccc tggattggaa ccaataaaaa  aaaaaaaaa aaattcct</p> <p>MGDRFIDFQ FQDSNSSLRP RLGNAATNNT CIVDDSFKNY LMGAVYSVVF ILGLITNSVS P  LFVFCFRMKM RSETAIFITN LAVSDLLFVC TLPFKIFYNF NRHWPFGDTL CKISGTAFLT  NIYGSMLFLT CTSVDRFLAI VYFPRSTRIR TRNSAIVCA GWILVLSSG ISASLFTSTN  VNNATTTCFE GFSKRWKTY LSKITIFIEV VGFIPLILN VSCSSVLRT LRKPATLSQI  GTNRKKVLKM ITVHMAVFV CFVPYNSVLF LYALVRSQAI TNCFLERFAK IMYPITLCLA  TLNCCDFPFI YYFTLESFQK SFYINAHIRM ESLFKTETPL TTKPSLPAIQ EEVSDQTNN  GGEIMLESTF</p>	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTHr2)	NM_005048	<p>gcccgtggc cccggcccg cccccagc tgcggtcgt tactggccac aagttgtctc A  tgggccagcc aagttggcaa ctgggaagct tctccgggc tctggaggag ggtccctgct  tcttctaca gccgttcgg gcatggccg gctggggcg tgcgtccacg tctggggttg  gctaatgctc ggcagctgcc tctggccag agcccagctg gattctgatg gcaccattac  tatagaggag cagattgtcc ttgtgctgaa agcgaaagta caatgtgaac tcaacatcac  agctcaactc caggaggagg aaggtaatg ttctcctgaa tgggatggac tcatgtgtg  gcccagagga acaggtggga aaatatggc tgttccatgc cctccttata tttatgactt  caaccataaa ggagttgctt tccgacactg taaccccaat ggaacatggg attttatgca  cagcttaaat aaaaacatggg ccaattattc agactgcctt cgctttctgc agccagatat  cagcatagga aagcaagaat tctttgaacg cctctatgta atgtataccg ttggctactc  catctctttt ggttccttgg ctgtggctat tctcatcatt ggttacttca gacgattgca  ttgcactagg aactatatcc acatgcactt atttgtgtct tctatgctga gagctacaag  catctttgtc aaagacagag tagtccatgc tcaatagga gtaaggagc tggagtccct  aataatgcag gatgacccac aaaattccat tggagcaact tctgtggaca aatcacata  tatcgggtgc aagattgctg ttgtgatgtt tatttacttc ctggctacaa attattattg  gatcctggtg gaaggtctct acctgcataa tctcatcttt gtggctttct ttccggacac  caaatacctg tggggcttca tcttgatagg ctgggggttt ccagcagcat ttgttcagc  atgggctgtg gcacgagcaa ctctggctga tgcgaggtgc tgggaactta gtgctggaga  catcaagtgg atttatcaag caccgatctt agcagctatt gggctgaatt ttattctgtt  tctgaatacg gttagagttc tagctaccaa aatctgggag accaatgcag ttgggcatga  cacaaggaa caatacagga aactggccaa atcgacactg gtcctggctc tagtctttgg  agtgcattac atcgtgttgc tatgctgcc tcaactcttc actgggctcg ggtgggagat  ccgcatgcac tgtgagctct tctcaactc ctctcaggtt tctttgtgt ctatcatcta  ctgctactgc aatggagagg ttccaggcaga ggtgaagaag atgtggagtc ggtggaatct  tccctggac tggaaaaagga caccgccatg tggcagccg agatcggtc cagtgcctcac  caccgtgac cacagcaca gcagccagtc acaggtggcg gccagcacac gcatgtgct  tatctctggc aaagctgcca agatggccag cagacagcct gacagccaca tcaatttacc  tggctatgct tggagtaact cagacagga ctgctgcca cactcttcc acgagagagc  caaggaagat agtgggagc agggagatga tattctaatg gagaagcctt ccagcctat  ggaatctaac ccagacactg aaggatgcca aggagaaact gaggatgttc tctgaatgga</p>	Homo sapiens

227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	NP_005039.1	<p> MAGLGASLHV  GNCFFPEWDGL  NYSDFCLRFLO  MHLFVSFMLR  VMFIYFLATN  LADARCWELS  LAKSTLVLVL  QAEVKKMWSR  IASRQPDSDI  GCQGETEDVL </p>	<p> LARAQLDSG  ISAVPCPPYI  FERLYVMYTV  VHAHIGVKEL  LHNLIFFVAF  PILAAIGLNF  CLPHSFTGLG  PPCGSRRCGS  EQDCLPHSFH  EETKEDSGRQ </p>	<p> TITIEEQIVL  YDFNHRGVAF  GYSISFGSLA  ESLIMQDDPQ  SDTKYLWVFL  ILFLNTVRVL  ATKIWEINAV  GHDTRKQYRK  FNSFQGFVS  SOSQVAASR  MVLISGKAAK  GDDILMEKPS  RPMESNPDTG </p>	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NM_000316	<p> cggagggagc  gctcctgctc  catgactaaa  gctcaaggag  tgcgtccaca  tgaggaggac  atgggaccac  tccggactac  tggcagctgg  caaatttctc  cacctggggc  ctttaggcgg  gctgcgcgcc  tgaggctgag  tgccaccgcc  cctggccacc </p>	<p> cgggtggcgat  tgctcagctc  tcttcctgct  gcccagccag  ccaggaaaga  ccactggcag  ggccgctggg  tcaatcaaaa  caggaagctg  ctcgtgaacg  ccctggcgct  cgcgcaacta  tcgtcaagga  cgccctaccc  acgcggcgct  ggattctggt </p>	<p> ggggaccgcc  cggtgacgag  gcacgtgctc  cataatggaa  taaggcatct  caggtaaccg  ggcaccaggt  aggccatgcc  caggaagctg  ctcgtgaacg  ccctggcgct  cgcgcaacta  tcgtcaagga  cgccctaccc  ggagggcgct  ggattctggt </p>	Homo sapiens

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	<p>catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct  gcccgtgtc ttctgtgctg tgtgggtcag tgctcagagt acctggcca acaccgggtg  ctgggacttg agctccggga acaaaaagtg gatcatcag gtgccatcc tggcctccat  tgtgtcaac ttcatcctct tcatcaatat cgtccgggtg ctgccacca agtgcggga  gaccaacgcc ggccgggtg acacacggga gcagtacgg aagctgctca aatccacgt  ggtgtcatg cccctcttt gggtccacta catgtcttc atggccacac catacacga  ggtctcaggg agctctggc aagtccagat gcactctgag atgtcttca actccttcca  gggatttttt gtcgcaatca tatactgtt ctgcaatggc gaggtacaa ctgagatcaa  gaaatcttgg agccgtgga cactggcact ggacttcaag gaaaggcac gcagcgggag  cagcagctat agctacggcc ccatgtgtc ccacacaagt tgacccaat tggccccc  tgtggactc ggctggccc taagcccc cctactgcc actgccacca ccaacggcca  ccctcagctg cttggccatg ccaagccagg gaccacgcc ctggagacc tggagacc  accacctgcc atggctgtc ccaaggacga tgggttctc aacggctcct gctcaggcct  ggacgaggag gcctctggc ctgagcggc acctgcctg ctacaggag agtgggagac  agtcattgta ccaggcgtg ggggctggac ctgtgacat agtggatgga cagatggacc  aaaagatgg tgggtgaatg atttccact cagggctgg ggcacaagg aaaaacaggg  aaaaaagaa aaaaaaaga aaaaaggaa</p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p>ALILCCPVL SAYALVDADD VMTKERQIFL LHRQAQCEK RLKEVLQRP A  SIMESDKGWT SASTSGKPRK DKASGLYPE SEEDKEAPTG SRYGRPCLP EWDHILCWPL  GAPGEVVAVP CPDIYDFNH KGHAYRRCDR NGSWELVPGH NRTWANYSEC VKFLTNETRE  REVFDRLGMI YTVGYSVSLA SLTVAVLILA YFRRLHCTRN YIHMHLFLSF MLRAVSIFVK  DAVLYSGATL DEARLTHEE LRAIAQAPPP PATAAGYAG CRVAVTFFLY FLATNYIYWL  VEGLYLHSLI FMAFFSEKKY LWGFTVFGWG LPAVFVAVW SVRATLANTG CWDLSSGNKK  WIIQVPILAS IVLNFILFIN IVRVLATKLR ETNAGRCDR QQYRKLLKST LVLMPLFGVH  YIVFMATPYT EVSGTLWQVQ MHYEMLFNSF QGFFVAILYC FCNGEVQAEI KKSWSRWTLA  LDFKRKARSG SSSYSYGPMV SHTSVTNVGP RVGLGLPLSP RLPTATTNG HPQLPGHAKP  GTPALETLET TPPAMAAPKD DGFLNGSCSG LDEASGPER PPALLQEEWE TVM</p> <p>agccacagaga cacattgggg ctgacctgcc gctgtgtca gtggaggcc agtgggtctg A  gccaagaagt gtcattggctg gtgtctgtga cgtttccctg gctgtcact gcggggcctg  tccgtggggc cggggcagac tccgcaaaagg acgcagacc tgcaagtccg cggcccagag  acacattggg gctgacctgc cgtgtgtgtc agtggaggc cagtgtgtct ggccaagaag  tgtcatggct ggtgtcgtgc acgtttccct ggtgtgtctc ctctgtgtc ctatggcccc  tgccatgcat tctgactgca tcttcaagaa ggagcaagcc atgtgcctgg agaagatcca  gagggccaat gagctgatgg gcttcaatga ttccttcca ggctgtcctg ggatgtggga  caacatcacg tgttggaaac ccgcccattg ggttgagatg gtcctgtgca gctgccctga  gctcttccga abcttaacct cagaccaagt ctgggagacc gaaaccattg gagagtctga  ttttggtgac agtaactcct tagatctctc agacttggga gtggtgagcc ggaactgcac  ggaggatggc tggctcggaac ccttccctca ttaactttgat gctgtgggt ttgatgaata  tgaatctgag actggggacc aggattatta ttaactgtga gtgaaggccc tctacacggt  tggctacagc acatccctcg tcacctcac cactgccatg gtcactcttt gtcgcttccg  gaagctgcac tgcacacgca acttcatcca catgaacctg ttgtgtctg tcatgtctgag</p>	Homo sapiens

231	3732	PACAP Receptor Type 1	NP_001109.1	<p> ggcgatctcc gtcttcatca aagactggat tctgtatgag gagcaggaca gcaaccactg  cttcactccc actgtggaat gtaaggccgt catggttttc ttcactact gtgttgtgtc  caactacttc tggctgttca tggaggccct gtacctcttc actctgctgg tggagacctt  cttccctgaa aggagatact tctactggta caccatcatt ggcctggggga ccccaactgt  gtgttgaca gtgtgggcta cgtgagact ctactttgat gacacaggct gctgggatat  gaatgacagc acagctctgt ggtgggtgat caaaggccct gtggttggtt ctatcatggt  taactttgtg cttttttatg gcattatcgt caactctgt cagaaccttc agtctccaga  catgggaggg aatgagtcca gcatctactt cgcactggcc cggcccacc tctgtctcat  cccactattc ggaatccact acacagtatt tgccttctcc ccagagaatg tcagcaaaaag  gaaaagactc gtgtttgagc tggggctggg ctctctccag ggcctttgtg tggctgttct  ctactgtttt ctgaatgggt aggtacaagc ggagatcaag cgaataatggc gaagctggaa  ggtgaaccgt tacttcgctg tggacttcaa gcaccgacac cagtctctgg ccagcagtgg  ggtgaatggg ggcaccagc tctccatcct gageaagagc agtccccaaa tccgcatgtc  tggcctccct gctgacaatc tggccacctg agccatgctc cccct  </p>	Homo sapiens
				<p> VHVSLSAALL LLPMAPMHS GRLRKGRAAC KSAAQRHIGA DLPLLSVGGQ WCWPRSVNAG P  WKPAHVGEV LVSCPELFRI FNPQVWETE TIGESDFGDS NSLDLSDMGV VSRNCTEDGW  SEPFHYFDA CGFDEYEST GDQDYIYLSV KALYTVGYST SLVTLTTAMV ILCRFRKLHC  TRNFTHMNLF VSFMLRAISV FIKDWILYAE QDSNHCFFST VECKAVMVFV HCVVSNYFW  LFIEGLYLFT LLVETFFPER RYFYWYTIIG WGTPTVCVTV WATRLRYFDD TGCWDMNDST  ALWVVIKGPV VGSIMNVLV FIGIIVILVQ KLQSPDMGN ESSIYLRAR STLLIPLFG  IHYTVFAFSP ENVSKRERLV FELGLSFQF FVAVLYCFL NGEVQAEIKR KWSRWKNRY  FAVDFKRRHP SLASSGVNGG TQLSILSKSS SQIRMSG LPA DNLAT  </p>	
232	3844	Apelin Receptor	NM_005161	<p> atggaggaa gtggtgattt tgacaactac tatggggcag acaaccagtc tgagtgtgag A  tacacagact ggaatcctc gggggccctc atccctgcca tctacatgtt ggtcttcttc  ctgggcacca cgggaaacgg tctgtgtgctc tggaccgtgt ttcggagcag ccggggagaag  aggcgctcag ctgatatctt cattgctagc ctggcggtgg ctgacctgac ctctgtggtg  acgtgcccc tgtgggctac ctacacgtac cgggactatg actggccctt tgggaccttc  ttctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt cttctgcttc  accggcctca gcttcgacg ctacctggcc atcgtgagc cagtggccaa tgctcggctg  aggctgcggg tcagcggggc cgtggccacg gcagttcttt ggggtctggc cgcctcctg  gccatgcctg tcatgtgtt accgaccac ggggacttgg agaaccac taagggtgcag  tgetacatgg actactccat ggtggccact gtgagctcag agtgggctg ggaggtgggc  cttggggtct cgtccaccac cgtgggcttt gtggtgccct tcaccatcat gctgacctgt  tacttcttca tcgcccacac cctcgtggc cacttcgca aggaacgat cgagggcctg  cggaaagcgg gccggctgct cagcatcctc gtggtgctgg tggtagctt tgcctgtgc  tggatgccct accactgggt gaagacgctg tacatgctgg gcagcctgct gcaactggcc  tgtgactttg acctcttct catgaacatc ttccctact gcacctgcat cagtctcgtc  aacagctgcc tcaacccctt cctctatgcc ttttctgacc cctcctccg ccaggcctgc  acctccatgc tctgctgtgg ccagagcagg tgcgcaggga cctccccag cagcagtggg  gagaagtcat ccagctactc ttccggggcac agccaggggc ccggcccccac catgggcaag </p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	<p>ggtggagaac agatgcacga gaaatccatc ccctacagcc aggagaccct tgtggttgac tag</p> <p>MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSSREK P RRSADIFIAS LAVADLTFFV TLPLWATYTY RDYDWFPGTF FCKLSSYLIF VNMYSVFCL TGLSFDRYLA IVRPVANARL RLRVSGAVAT AVLWVLAALL AMPVMVLRIT GDLENTTKVQ CYMDYSMVAT VSSEWAWEG LGVSTTVGTF VVPFTIMLTC YFFIAQTIAG HFRKERIEGL RKRRRLLSII VLVVTFALC WMPYHLVKTLL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPFLLYA FFDPRFRQAC TSMGCCGQSR CAGTSHSSSG EKSASYSSGH SQPGPNMGK GGEQMHEKSI PYSQETLVLD</p>	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	<p>gaattcggca cgagtcaggg aagcagcccc ggcgccagc agggagctca ggacagagca A ggctccctgg gaagcctccg ggtgataggg gtgtccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aaatgaatga actgctttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agcctcgagt ggcctgcagt cacagggaac cctcagggaag acctccggg cagagaccag agggaagccc atctctccag cagaactgct tggatttttc taccaggagg ctccaggctc tgcaacaatg atagcagaag ctgatggcat ctagagatct aggtgggac tagcacagca tcacttctac cactttctgt tggtcacagc aactaccat gccagtgcag attcaagggg aggagaata gagtcacatt ctgatggga ggctgacat aagatggagg atgaagatta caacacttcc atcagittacg gtgatgaata ccttgattat tttagactcca ttgtggtttt ggaggactta tccccttgg aagccagggt gaccaggatc ttctctgggtg ttggtctacag catcgtctgc ttctcggga ttctgggcaa tggctgggtg atcatcattg ccaccttea gatgaagaag acagtgaaca tggctggtt cctcaacctg gcagtggcag atttctgtt caacgtcttc ctcccaatcc atatcaccta tgcgccatg gactaccat gggttttcgg gacagccatg tgaagatca gcaacttctc tctcatccac aacatgttca ccagcgtctt cctgtgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctggtccca gaaccaccg agcgttcgcc tggcttacat ggctgcagc aacctgcag ttctgtggtt ctcttgagt tcccacttc tgtcttccg ggacacagcc aacctgcag tgaataatc ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tctgtgccc ctcactcca atggaccct gtgggggtata gccggcacat ggtgtgtgact gtcacccgt tctctgtgg ctctgtggtc ccagtcctca tcatcacagc ttgtacctc accatcgtgt gcaaacctga gcgaaccgc ctgggccaaga ccaagaagcc ctccaagatt attgtgacca tcatcattac ctctctctc tgtgtgtgccc cctaccacac actcaacctc ctgagctcc accacactgc catgctggc tctgtcttca gcctgggttt gccctggcc actgcccctg ccattgcaa cagctgcatg aaccctctc tgtatgtttt catgggtcag gacttcaaga agttcaaggt ggcctcttc tctgcctgg tcaatgctct aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcatc aatgaatgag aggacttcta tgaatgagag ggagaccggc atgctttgat cctcactgtg gaacctca atggactctc tcaaccagg gacaccaag gatatgtctt ctgaagatca aggaagaac ctctttagca tcccaatt ttcactgcat tttgcatggg atgaacagtg ttttatgctg ggaattagc gcttgaacc ctttcttct agtggacaga acatgctgtg ttccatacag ccttggacta gcaatttatg ctcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc</p>	Homo sapiens

[illegible]



237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggtt ttggaattt gttgaagtc acttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagcgaat ctgcataagg aagccactt tatctaaatg atattagcca ggtccctgg tgtctagga gaaacagaca agcaaaacaa agtgaaaacc gaatggatta actttgcaa accaaggag atttcttagc aaatgagtct acaaaatag acatccgtct ttcccattt gttgatgtt tatttcagaa tcttggtga ttcatattcaa gcaacaacat gttgtattt gttgtgttaa aagtactttt cttgattttt gaatgtattt gtttcaggaa gaagtattt tatggattt tctaaccgt gttaactttt ctagaatcca cctcttggtg ccccttaagca ttactttaac tggtagggaa cgccagaact ttaagtcca gctattcatt agatagtaat tgaagatatg tataaatatt acaaagaata aaaaatatatt actgtctctt tagtatggtt ttcatgcaa ttaaacggag agatgtcttg tttttttaaa aagaatagta ttaatatggt ttctgacttt tgtggatcat tttgcacata gctttatcaa cttttaaaca ttaataaact gattttttt aag MGPTSVPLVK AHRSSVSDYV NYDIIVRHYN YTGKLNISAD KENSIKLTSV VFILICCFII P LENI FVLLTI WTKKFKRPM YFIGNLALS DLLAGVAYTA NLLSGATTY KLTPAQWFLR EGSMFVALSA SVFSLLAIAI ERYITMLRMK LHNSNNFRL FLISACWVI SLILGGLPIM GWNCSIALSS CSTVLPYHK HYILFCTVTF LLLLSIVIL YORIYSLVRT RSRRLTFRKN ISKASRSSEK SLALLKTVII VLSVFIACWA PLFILLILDV GCKVKTCDIL FRAEYFLVLA VLNSGTNP11 YTITNKEMRR AFIRIMSOCK CPSSGSAGKF KRPIIAGMEF SRSKSDNSSH PQKDEGNPE TIMSSGNVNS SS	Homo sapiens
238	3847	Sphingolipid NM_005226 Receptor Edg3	atggcaactg cctcccgcc gcgtctccag ccggtgcggg ggaacgagac cctgcgggag A cattaccagt acgtggggaa gttggcgggc aggttgaag aggcctcga gggcagcagc ctcaccaccg tgctcttctt ggtcatctgc agctcatcg tcttgagaa cctgatggtt ttgattgcca tctggaaaaa caataaattt cacaaccgca tgtactttt cattggcaac ctggctctct gcgacctgct ggcgggcac gcttacaag tcaacattct gatgtctggc aagaagacgt tcagcctgtc tcccacggtc tggttcctca gggagggcag tatgttcgtg gcccttgggg ggtccacctg cagcttactg gccatcgcca tcgagcgga cttgacaatg atcaaaaatga ggccttacga cgccaaacaag aggcaccgct tcttctctct gatcgggatg tgctgggtca ttgccttcac gctgggcgcc ctgccattc tgggctggaa ctgcctgcac aatctccctg actgctctac catcctgccc ctctactcca agaagtacat tgcctctgc atcagcatct tcacggccat cctggtgacc atcgtgatcc tctacgcag catctacttc ctggtgaagt ccagcagcgg taagtgggcc aaccacaaca actcggagcg gtccatggca ctgctgcgga ccgtggtgat tgtgtgagc gttgttcacg cctgctggtc cccactcttc atcctcttcc tcattgatgt ggcctgcagg gtgcaggcgt gccccatcct cttcaaggct cagtgggtca tcgtgttggc tgtgtctaac tccgccatga acccggtcat ctacacgtg gccagcaagg agatgcggcg ggccttcttc cgtctggtct gcaactgctt ggtcagggga cgggggggccc ggcctcacc catccagcct gcgctcgacc caagcagaag taaatcaagc agcagcaaca atagcagcca ctctccgaag gtcaagaag ggtatctctg caactga tcactcctga tcatggacaa gaagcagca cttcagaatg ggtatctctg NATALPPRLQ PVRGNFTIRE HYQYVGKLAG RLKEASEGST LTTVLFLVIC SFVLENLMV P LIAIWKNKF HNRMYFFIGN LALCDLLAGI AYKWNILMSG KKTFSLSPTV WFLREGSMFV ALGASTCSLL AIAIERHLM IKMRPYDANK RHRVFLLMG CWLIAFTIGA LPILGWNCILH	Homo sapiens
239	3847	Sphingolipid NP_005217.1 Receptor Edg3		Homo sapiens

240	3848	C-C Chemokine Receptor 9	NM_006641	<p> NLPCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHNNSERSMA  LLRTVVIVWS VFLACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL  ASKEMRRAFF RLVNCNLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSKP VKEDLPHTDP  SSCINDKNAA LQNGIFCN  gccccctcgc ccaggcgag agcaacccag ctcttcccc agacactgag agctggtggt A  gcctgtctgc ccaggggagag ttgcatcgcc ctcccaagc cctattccta acatggctga  tgactatggc tctgaatcca catcttccat ggaagactac gttaaactta acttcactga  cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttcctcc cacccttgta  ctggctcgtg ttcactcgtg gtgccttggg caacagtctt gttatccttg tctactggta  ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttggcaa ttgctgacct  cctcttctt gtcactcttc ccttctggc cattgtcgt gctgaccagt ggaagtcca  gaccttcag tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt  gctgatcatg tgcatacagc tggacaggta cattgccatt gccaggcca tgagagcaca  tacttgagg gagaaaaggc ttttgtacag caaaatggtt tgctttacca tctgggtatt  ggcagctgct cctgcaccc cagaaaatctt atacagccaa atcaaggagg aatccggcat  tgctatctgc acctatggtt accctagcga tgagagcacc aaactgaagt cagctgtctt  gacctgaag gtcatctctg gttcttctt cctcttctg gtcatggctt gctgctatac  catcatcatt cacacctga tacaagccaa tctttgtctt gtctcagttt cctacaact gcattttgtt  gacctcact gtctcgaccg tctttgtctt atgccatgtt catctccaac tgtgccgttt ccaccaacat  gtgagagacc attgacgctt atgacacct cccagacct cgcctcttc cactgttgc tgaacctgt  tgacatctgc ttccagggtc agagattccg cgggatctc gtgaaaacc tgaagaactt  tctctatgtt ttgtgggtg agagattccg agtggtttc atttacaagg agagaggga gcttgaagct  gggttgcatc agccaggccc agtggtttc caacctcagg agcactctc ctctgaggg tcttctctga  gtcgtctatg ttgctggaga gaaatgagaa atacagaaac agtttcccca ctgatgggac  gtgcatggt tcttttggaa gaaaactca gaaaatatt tcaaaatcaa ctgactagt caggaggctg  cagagagagt gaaagagaaa agcaaatatt atgccgcaa ttctcaagg agactaagg accggcactg  ttgattggct cttagctgtg atgcgcgga actcgcgga gcatcaatgc cgtgcctct ggaggagccc  tggagcaccc tggctttgcc actcgcgga gtgaacttct ggggttctag ttctcatgct gcctctcca  ttggattttc tccatgcact gtgaacttct ggtgtgtgct acagaccga aaagcagaaa gtttcgtgaa  aaaggggaca cagaagcact ggtgtgtgct ttttaccct gctcttgag ctgataccc atgceaggtc  aatgtccatc ttgtggaaat ttttaccct gcaatctcag acctaatctt cttctgttct  ttatagattc ctgatctaga accttccag gtgaaggtcc ttgttctgat ttgaaaaca tctgcaggtc  ccttgttctg ttctgggcca aactgaccac accacaagg catccaaagt ctgttggctt  ttgccagtga acccctggac aactgaccac accacaagg catccaaagt ctgttggctt  ccaatccatt tctgtgtcct gctggaggtt ttaacctaga caaggattcc gcttattcct  tggatgggtg acagtgtct tccatggcct gagcagggag attataacag ctgggttctgc  aggagccagc ctggccctg ttgtaggctt gttctgttga gtggacttg ctttgggtcc  accgtctgtc tgctccctag aaaatgggct ggttcttttg gcccttctt tctgaggcc  cactttattc tgaggaatag agtgagcaga tatgggcag agccaggtag gcaaaagggg  tgaagcgag gccttggctg aaggtattt acttccatgc ttctcctttt cttactctat </p>
				Homo sapiens

241	3848	C-C Chemokine Receptor 9	NP_006632.2	SSMEDYVNFN FTDFYCEKNN VRQFAASHFLP PLYWLVEIVG ALGNSLVILV P YWYCTRVKTM TDMFLNLAI ADLLFLVILP FWAIADADQW KEQTFMCKVV NSMYKMNIFYS CVLLIMCISV DRYAIAQAM RAHTWREKRL LYSKMVCFTI WVLAALCIP EILYSQIKEE SGIAICTMVY PDESTKLKS AVLTILKVLIG FFLPFVVMAC CYTIIHTLI QAKKSSHKHA LKWTITVITV FVLSQFPYNC ILLVQITDAY AMFISNCAVS TNIDICFQVT QTIAFFHSCL NPVLVYFVGE RFRDLVKTL KNLGCISSQAQ WVSFTREGS LKLSSMLLET TSGALS L	Homo sapiens
242	3849	G Protein- Coupled Receptor GPR1	NM_005279	atggaagatt tggaggaaac attatttgaa gaattgaaa actattccta tgacctagac A tattactctc tggagctctga ttggaggag aaagtcacgc tgggagttgt tcaactgggc tccctgggtg tataattggtt ggcttttgggt ctgggaattc caggaaatgc catcgtcatt tgggtcacgg ggtcacaagt gaagaagaca gtcaccactc tgtggttccct caatctagcc attgcgggatt tcaattttct tctctttctg cccctgtaca tctcctatgt ggccatgaat ttccactggc cctttggcat ctggctgtgc aaagccaatt ccttactgc ccagttgaac atgtttgcca gtgttttttt cctgacagtg atcagcctgg accactatat cacttatgtc catcctgtct tatctcatcg gcatcgaaac cteaagaact ctctgattgt cattatattc atctggcttt tggctctctc aattggcgggt cctgcctgt acttccggga cactgtggag ttcaataatc atactctttg ctataacaat ttbcagaagc atgacacctga cctcactttg atcaggcacc atgttctgac ttgggtgaaa ttatcatgt gctatctct ccttttgcta acaatgagta ttgtctactt gtgtctcatc ttcaaggta agaagcgaac agtctcgatc tccagtaggc atttctggac aattctggtt ttggttgggt cctttgtgtg ttgctgagct ccttatcacc tgttagcat ttgggagctc accattcacc acaatagcta ttccccaccat gtgatgcagg ctggaatccc cctctccact ggtttggcat tctccaatag ttgcttgaac cccatccttt atgtcctaatt tagtaagaag ttccaagctc gcttccggtc ctcagttgct gagatactca agtacacact gtgggaagtc agctgttctg gcacagtgag tgaacagctc aggaactcag aaaccaagaa tctgtgtctc ctggaacag ctcaataa MEDLEETLFE EFENYSYDLD YYSLESDLEE KVLGVVHWV SILVLYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFLLFL PLYISYVAMN FHWPFGIWLC KANSFTAQLN MFASVFFLTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDTVE FNNHTLCYNN FQKHDPDLTL IRHVLTWVK FIIGYLFPLL TMSICYLCIL FKVKRRTVLI SSRHFVITLV VVAFVVCWT PYHLFSIWEL TIHNSYSYSH VMQAGIPLST GLAFLNSCLN PILYVLISKK FQARFRSSVA EILKYLWEV SCSGTVSEQL RNSETKNLCL LETAQ atggcctcat cgaccactcg gggcccacag gtttctgact tattttctgg gctgcgcgcg A ggggtcacaa ctcccgcacaa ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct ggcgcggaag ctccagcggt cagcccttc cagagctcgc agctggtgca tcaagctgaag gggctgacg tgcgtctcta cagcgtcgtg gtggtcgtg gctggtggg caactgcctg ctggtgctg tgatcgcgcg ggtgcgcgcg ctgcacaacg tgacgaactt cctcatcggc aacctggcct tgtccgacgt gctcatgtgc accgcctgct gcgcgctcac gctggcctat	Homo sapiens
243	3849	G Protein- Coupled Receptor GPR1	NP_005270.1	atggaactcag aaaccaagaa tctgtgtctc ctggaacag ctcaataa MEDLEETLFE EFENYSYDLD YYSLESDLEE KVLGVVHWV SILVLYCLAFV LGIPGNAIVI P WFTGLKWKKT VTTLWFLNLA IADFLLFL PLYISYVAMN FHWPFGIWLC KANSFTAQLN MFASVFFLTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLLASLIGG PALYFRDTVE FNNHTLCYNN FQKHDPDLTL IRHVLTWVK FIIGYLFPLL TMSICYLCIL FKVKRRTVLI SSRHFVITLV VVAFVVCWT PYHLFSIWEL TIHNSYSYSH VMQAGIPLST GLAFLNSCLN PILYVLISKK FQARFRSSVA EILKYLWEV SCSGTVSEQL RNSETKNLCL LETAQ atggcctcat cgaccactcg gggcccacag gtttctgact tattttctgg gctgcgcgcg A ggggtcacaa ctcccgcacaa ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct ggcgcggaag ctccagcggt cagcccttc cagagctcgc agctggtgca tcaagctgaag gggctgacg tgcgtctcta cagcgtcgtg gtggtcgtg gctggtggg caactgcctg ctggtgctg tgatcgcgcg ggtgcgcgcg ctgcacaacg tgacgaactt cctcatcggc aacctggcct tgtccgacgt gctcatgtgc accgcctgct gcgcgctcac gctggcctat	Homo sapiens
244	3850	G Protein- Coupled Receptor 10 (GPR10)	NM_004248	atggcctcat cgaccactcg gggcccacag gtttctgact tattttctgg gctgcgcgcg A ggggtcacaa ctcccgcacaa ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct ggcgcggaag ctccagcggt cagcccttc cagagctcgc agctggtgca tcaagctgaag gggctgacg tgcgtctcta cagcgtcgtg gtggtcgtg gctggtggg caactgcctg ctggtgctg tgatcgcgcg ggtgcgcgcg ctgcacaacg tgacgaactt cctcatcggc aacctggcct tgtccgacgt gctcatgtgc accgcctgct gcgcgctcac gctggcctat	Homo sapiens



248	3852	CX3C Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAILGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAERNQEIQK ALCLICGCI PSSLAQRARS PSDV gggagagatc cagattccct ttgcagtcca cgccagccct tcaccatgga tcagttccct A gaatcagtga cagaaaaact ttgagtacgat gatttggctg aggcctgtta tattggggag atcgtgtct ttgggactgt gttcctgtcc atattact cegtcatctt tgccattggc ctggtgggaa atttgttggg agtggttggc ctacacaaca gcagaagcc caagagtgc accgacattt acctctgaa cctggccttg tctgattcgc tgtttgtagc cacttggcc ttctggactc actatttgat aaatgaaaaa ggccctcaca atgcatgtg caaattcact accgctctct tcttcacgtg cttttttgga agcatactct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aactccatga acaaccggac cgtgcagcat ggcgtacca tcagcctagg cgtctgggca gcagcattt tgggtggcag accccagttc atgttcacaa agcagaaaaa aaatgaatgc cttgtgact acccgaggt cttcaggaa atctggcccg tgcctccgaa tgtggaaaaa aatttcttg gttcctact cccctgctc attatgagtt attgctactt cagaatcgc cagagctgt tttcctgcaa gaaccacaag aaagccaaaag ccattaaact gatcctctg gtggtcactg tgttttctt cttctggaca ccctacaacg ttatgatattt cctggagacg cttaaactct atfactctt tccagttgt gacatgagga aggatctgag gctggccctc agtgactg agcgggtgc attagccat tgttgctga atctctcat ctatgcatt gctggggaga agttcagaag ataccttac cacctgatg ggaatgcct ggctgtcctg tgtgggctg cagtcacagt tgatttctc tcactggaat cacaaggag caggcatgga agtggtctga gcagcaatt tacttaccac acgagtgatg gagatgcatt gctcctctc tgaagggaat ccaaaagcct tglgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggg agatttttg ttgttattc ttacaggcac aaaaatgatg acccaatgca cacaacaaa cctagagtg ttgttgagaa ttgtgtcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gtagagacat ttctctact gcaaatgtca tcagaactt ttggtttgca gatgacaaaa attcaactca gactagtta gttaaatgag ggtggtgaat attgttcata ttgtggcaca agcaaaaagg gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL INLALSDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAALV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTENFLGF LPLLLMSYC YFRIIQTLS CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETCLKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtctttac acagctgtgt tcttgactgg agtgctgggg aacctgttc tcattgttc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atcttcttg tcacttgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctct tctgttgcaa agggagctcc tacatgatct gcactgaat gcactgcagt gtcctctgc tcaattgcat gagtgtgac cgctacatgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgacagcat ctggtttacc	Homo sapiens
249	3852	CX3C Chemokine Fractalkine Receptor 1	NP_001328.1	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL INLALSDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAALV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTENFLGF LPLLLMSYC YFRIIQTLS CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETCLKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtctttac acagctgtgt tcttgactgg agtgctgggg aacctgttc tcattgttc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atcttcttg tcacttgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctct tctgttgcaa agggagctcc tacatgatct gcactgaat gcactgcagt gtcctctgc tcaattgcat gagtgtgac cgctacatgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgacagcat ctggtttacc	Homo sapiens
250	3853	G Protein- Coupled Receptor GPR15	NM_005290	gtgtctgagc cctcaaatg aggggaacca gggcctgagc caagcta MDQFPESVTE NFEYDDLAE CYIGDIVVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL INLALSDLIF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVTIS LGVWAAALV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTENFLGF LPLLLMSYC YFRIIQTLS CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETCLKYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRYLYHLYGK CLAVLCGRSV HVDFSSSESQ RSRHGSVLSS NPYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacgag cccaaactct A gacatcagg agaccactc ccatgttctt tacacctgt tcttcttcc agtctttac acagctgtgt tcttgactgg agtgctgggg aacctgttc tcattgttc gttgcatttc aaaccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atcttcttg tcacttgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctct tctgttgcaa agggagctcc tacatgatct gcactgaat gcactgcagt gtcctctgc tcaattgcat gagtgtgac cgctacatgg ccattgtgtg gccagtcgta tccaggaaat tcagaaggac agactgtgca tatgtagtct gtgacagcat ctggtttacc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL DYVATSPNS DIRETHSHVP YTSVFLPVFY TAVFLTGVLG NLVLMGALHF P KPGSRRLIDI FIINLAASDE IFLVTLPLMW DKEASIGLWR TGSFLCKGSS YMISVNMHCS VLLLTOMSDV RYLAIVWPVV SRKFRRTDCA YVVCASIWFI SCLLGLPTLL SRELTLLDDK PYCAEKKATP IKLIWSLVAL IFTFFVPLLS IVTCYCCIR KLCAHYQOSG KHNKKLKSI KIIFIWAAF LVSWLPFNTF KELAIIVSGLR QEHYLPAIL QLGMEVSGPL AFANSCVNP IYYIFDSYIR RAIVHCLCPC LKNYDFGSST ETSDSHLTKA LSTFIHAEDF ARRRKRSVSL gaaagagaca aagcagcaat taaagtcagc ccagcaccaa ctcgcagcc aagcgttaca A ctggaaacta ctttttaag caacaaaaga gtctaaaaa aaatacaaca ttctttaa acactgttc cagaaagagc tattttaaca gaagcaactc aaagatatcc cttcgacaga agtggaaagt ctgaaaaatg ctcatctctc acacagactt ttgatggaca ggagtttcta agtatcatgc ctaccaacaa gctgtaaaat gatcaccccg acaaatcaag atcaacctgt cccttttaac agctcacatc cagatgaata caaaattgca gcccttgtct tctatagctg tatctcata attggattat ttgttaacat cactgcatta tgggttttca gttgtaccac caagaagaga accacggtta ccatctatat gatgaatgtg gcattagtgg acttgatatt tataatgact ttaccctttc gaattgttta ttatgcaaaa gatgaatggc catttgaga gtactttctgc cagattcttg gagctctcac agtgttttac ccaagcattg ctttatggct tcttgccctt attagtctg acagatacat ggccattgta cagccgaagt acgcaaaaga acttaaaaa acgtgcaaa cctgtctgac tgctctataa agaccagat aaagactcca ctcccgcac cacgaccacc cctctgctac tcactatct tcactatct aagcgtgtg aacgtgctga acctcactg ctgctcaag atttctgaca ttccttctga ttccttctgt cactatgatt ggggtgctact tggctattat actgacattt ttttcttga ttccctgtt gacgtctaa gctgaaacc aaagtcaagg agaagtccat tcataatctc cttcacggca ggacgtctta tgggtcaggt gctgaaacc tttatgacct tccacatctg aaggatcatc atcacgctgc tgggtcaggt gaacagttac aatccctggg gagcctttac ttcgccttc ctgatgctgg gaacggggga gacgtgtct ggaatgtgatt ctctactaca tcgtttcaaa caccttctc atgaacctca gcacgtgtc ttatgtcat gataatcgt aattacctc gaagcatgag acaatttcag gctcagatca ttatgtcat gtagtctac gtcaactaagc aaataaaca gtgaaatgtt cagaaaaagt ttccgatctg ttagtctac gtcaactaagc aaataaaca gtgaaatgtt atgaataata aggttcttc atttcaatcc catcaaaat cacttacta actactctg cgtaaatgga tattctgtat aatactatca agtccctttt ccttgaaaa aataaattca ttatcttcat ttaaaaaaa aaaaaaaa	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca aagcagcaat taaagtcagc ccagcaccaa ctcgcagcc aagcgttaca A ctggaaacta ctttttaag caacaaaaga gtctaaaaa aaatacaaca ttctttaa acactgttc cagaaagagc tattttaaca gaagcaactc aaagatatcc cttcgacaga agtggaaagt ctgaaaaatg ctcatctctc acacagactt ttgatggaca ggagtttcta agtatcatgc ctaccaacaa gctgtaaaat gatcaccccg acaaatcaag atcaacctgt cccttttaac agctcacatc cagatgaata caaaattgca gcccttgtct tctatagctg tatctcata attggattat ttgttaacat cactgcatta tgggttttca gttgtaccac caagaagaga accacggtta ccatctatat gatgaatgtg gcattagtgg acttgatatt tataatgact ttaccctttc gaattgttta ttatgcaaaa gatgaatggc catttgaga gtactttctgc cagattcttg gagctctcac agtgttttac ccaagcattg ctttatggct tcttgccctt attagtctg acagatacat ggccattgta cagccgaagt acgcaaaaga acttaaaaa acgtgcaaa cctgtctgac tgctctataa agaccagat aaagactcca ctcccgcac cacgaccacc cctctgctac tcactatct tcactatct aagcgtgtg aacgtgctga acctcactg ctgctcaag atttctgaca ttccttctga ttccttctgt cactatgatt ggggtgctact tggctattat actgacattt ttttcttga ttccctgtt gacgtctaa gctgaaacc aaagtcaagg agaagtccat tcataatctc cttcacggca ggacgtctta tgggtcaggt gctgaaacc tttatgacct tccacatctg aaggatcatc atcacgctgc tgggtcaggt gaacagttac aatccctggg gagcctttac ttcgccttc ctgatgctgg gaacggggga gacgtgtct ggaatgtgatt ctctactaca tcgtttcaaa caccttctc atgaacctca gcacgtgtc ttatgtcat gataatcgt aattacctc gaagcatgag acaatttcag gctcagatca ttatgtcat gtagtctac gtcaactaagc aaataaaca gtgaaatgtt cagaaaaagt ttccgatctg ttagtctac gtcaactaagc aaataaaca gtgaaatgtt atgaataata aggttcttc atttcaatcc catcaaaat cacttacta actactctg cgtaaatgga tattctgtat aatactatca agtccctttt ccttgaaaa aataaattca ttatcttcat ttaaaaaaa aaaaaaaa	Homo sapiens



257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgctc cagctggccc tggccgacct cttgtggcc ctgactctgc cttcgcggc</p> <p>agcaggggct cttcagggtt ggagtctggg aagtgcacc tgcgcacca tctctggcct</p> <p>ctactcggcc tcttccacg ccggcttctt cttcctggcc tgtatcagcg ccgaccgcta</p> <p>cgtggccatc ggcgagcgc tccagccgg gccggggccc tccactccc gccgcgcaca</p> <p>cttggctcc gtcactgtgt ggtctgttc actgtctcg gcgtgcctg cgtgctctt</p> <p>cagccaggat ggcagcggg aaggccaaag acgtctgcg ctcacttcc ccgagggcct</p> <p>cacgcagacg gtgaagggg cgagcgctt ggcgaaggtt gccctgggtt tgcgctgc</p> <p>gctggggctc atggtagcct gctacgcct tctggccg acgtgctg ccgccagggg</p> <p>gcccgagcg cggcgtgcg tgcgctcgt ggtgctctg gtggcgccct tcgtggtgct</p> <p>gcagctgccc tacgctctg cctgtctgt ggatactgc gatctactg ctgcgcgga</p> <p>gcggagctgc cctgccaaga aacgcaagga tctgcactg ctggtgacca gcggttgcc</p> <p>cctcgcccg tctggcctca atccgttct ctacgcttc ctgggctgc gttccgcca</p> <p>ggacctgcgg aggtgctac ggggtgggag ctgcctca ggcctcaac ccgcgcggg</p> <p>ctgccccgc cggccccgc ttcttctctg ctacgctcc acggagacc acagtctctc</p> <p>ctgggacaac taggctcgt aatctagagg agggggcagg ctgagggtcg tgggaaagg</p> <p>gagtaggtgg ggaacactg agaaagagg agggacctaa agggactacc tctgtgcctt</p> <p>gccacattaa attgataaca tggaaatgaa aaaaaaaaa aaaa</p> <p>MGTEATEQVS WHYSGDEED AYSAEPLPEL CYKADVOAFS RAFQPSVSLT VAALGLANG P</p> <p>LVLATHLAAR RAARSPTSAH LLQALADIL LALITLFAAA GALTQWSLGS ATCRTISGLY</p> <p>SASFHAGFLF LACISADRYV AIARALPAGP RPSTPGRAHL VSVIWL LSL LLALPALIFS</p> <p>QDQREGQRR CRLIPEGLT QTVKGASAVA QVALGFALPL GVMVACYALL GRTLLAARGP</p> <p>ERRRALRWV ALVAAFVLIQ LPYSLALLLD TADLLAARER SCPASKRKDV ALLVTSGLAL</p> <p>ARCGLNPIVY AFLGLRFRQD LRLLRGSS PSQPQPRRG PRRLSSCS APTETHLSLW</p> <p>DN</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgcctctg tgtctccagc gggggcctcg gccggggcag tcccaatgc caccgcagt A</p> <p>acaacagtgc ggaaccaatgc cagcgggctg gagtgcccc tgttccacct gttgcccg</p> <p>ctggacgagg agtgcattg cacttccca ggcctgtgctg tggcgtgat ggcggtgcac</p> <p>ggagccatct tctggcagg gctggtgctc aacgggctg cgtgtactg cttctgctgc</p> <p>cgcacccggg ccaagacacc ctacgtctc tacaccatca acctggtgtt gaccgatcta</p> <p>ctggtagggc tgcctctgccc cagcgccttc gctgtgtact acggcgccag ggcgtgctg</p> <p>cgtgtgctt tcccgcaegt cctcggttac ttcctcaaca tgcactgctc catctcttc</p> <p>ctcaacctga tctgctgga ccgtacctg gccatctgccc ggcgggaagc tcccgccgc</p> <p>tgcggccagc ctgctgtgc caggccctg tggccttgc tgtggctggc cgccgtgccc</p> <p>gtcacctctg cgggtctggg cgtgacagg agccggccct gctgcctgt ctttgctg</p> <p>actgtcctg agttcctgct gccctgctg gtcactagcg tgtttaccg ccgcatcatg</p> <p>tgtgactgt cgcggccggg tctgtccac caggtgctgc agcgcgct gcgggccatg</p> <p>cagctcctgc tcacgtgtct cactatctt ctgctgtct tcacgacct ccacgccgc</p> <p>caagtggccg tggcgtgtg gccgacatg ccacaccaca cgagcctcgt ggtctaccac</p> <p>gtggccgtga cctcagcag cctcaacagc tgcattgacc ccactgtcta ctgctcgtc</p> <p>accagtggct tccaggccac cgtccgaggc ctcttcggcc agcacggaga gcgtagccc</p> <p>agcagcgtg acgtggtcag catgcacagg agtcccaagg gctcaggccg tcatcacatc</p>	Homo sapiens



259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcagc cctcacccag gccctggcta atggggccga ggcttag GAIFLAGLVL NGLALVFECC RTRAKTPSVI YTINLVVTDL LVGLSLPTRF AVYGGARGCL RCAFFPHVLGY FLNMHCSILF LTCICVDRL AIVRPEAPAA CRQPACARAV CAFWLAAGA VTLSVLGVGTG SRPCCRVPFAL TVLEFLPLL VISVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIIF LVCFTPFHAR QVAVALWPDV PHHTSLVVYH VAVTLSSLNS CMDPIVYCFV TSGFQATVRG LFGQHGHERP SSGDVVSMHR SSKSGSRHHI LSAGPHALTQ ALANGPEA atgaactcca cctggtagtg taatcagagc agccaccctt ttgacctctt ggcatttggc A tatttggaaa cctgcaattt ttgacctttg gaagtattga ttattgtctt tctaactgta ttgattattt cttggcaaat catitgtgatt ttgtatttc cttgtgcacc ttgttgggagc catcacacta caagtattt tatccagact atggcatatg ctgacctttt ttgtggggtg agctgctgtg tcccttctt atcactctc catcacccc ttccagtaga ggagtccttg acttggccaga tatttgggtt ttagtatca gtctgaaga gctctccat ggcttctctg gcctgtatca gaattgtag atacattgac attataaac ctttaacctc taatactctg gttacacctt ggagactacg cctgtgtatt ttctgtattt ggcatactc gacctggctc ttcctgacct cttttttcca cttggggcaaa cctggatatac atggagatgt gtttcagtg tgtgcggagt cctggcacac cgactcctac ttaccctgt tcatcgtgat gatgtatat gcccagcag ccttattgt ctgcttcacc tatttcaaca tctccgcat ctgccaaacg cacacaaaag atatacaga aaggcaagcc cgcttcagca gcagagtggt ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatgttcc ttgttcgaat cactagtgtc ttttacatcc tctggttgc atatatcacc ttgcttctgt tggaaagctc cactggccc agcaaccgt tgcctcctt cttgaccacc ttgcttctgta ttagtaaacg tttctgcaac tgtgtaattt atagtctct caacagtgtc ttccaaagag gactaaagc cctctcagg gctatgtga cttcttctg aagtcagact acagccaaag accctaac agttagaagc aaaggccctc ttaatggatg tcatatctga NP_005285.1 MNSTLDGNQS SHPFCLLAG YLETVNFCIL EVLIIVFLTV LIISGNIIVI FVFHCAPLIN P HHTTSYFIQT MAYADLFVGV SCWPSLSIL HHPLPVEESL TCQIFGFVWS VLKSVSMASL ACISIDRYIA ITKPLTYNTL VTPWRLRLCI FLIWLSTLV FLPSFFHWGK PGYHGDVFWOW CAESWHTDSY FTLFIVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLFRITSV FYILWLPYII YFLESSTGH SNRFASFLTT WLAI SNFCN CVIYSLSNSV FQGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI atgtgttttt cctccattct ggaatacaac atgcagtctg aatctaacat tacagtgcga A gatgacatgt atgacatcaa caccatattg taccacacc tatcatatcc gttaaagcttt caagtgtctc tcaacggatt tcttatgtta gaaattgtgt tgggacttgg cagcaacctc actgtattgg tactttactg catgaaatcc aacttaata actctgtcag taacattatt acaatgaatc ttcatgtact tgatgtaata atttgtgtgg gatgtattcc tctaactata gttatccttc tgccttctact ggagagtaac actgctctca ttgtctgttt ccatgagctt tgtgtatctt ttgcaagtgt ctcaacagca atcaacgttt ttgctatcac ttgtggacaga tatgacatct ctgtaaaacc tgcaaaccca atctgacaa tgggcagagc tgtaattgta atgatatcca ttgtgatttt ttcttttttc tcttctctga ttccttttat tgaggtaaat	Homo sapiens
260	3858	G Protein- Coupled Receptor GPR21	NM_005294		Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1		Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295		Homo sapiens

263	3859	G Protein- Coupled Receptor GPR22	NP_005286.1	<p>ttttcagtc ttcaaatgg aaatacctgg gaaaacaaga cacttttatg tgtcagtaca  aatgaatact acactgaact ggaatagtat tatcacctgt tagtacagat cccaatattc  ttttcactg tttagtaaat gttaatcaca tacaccaaaa tacttcaggc tcttaatat  cgaataggca caagattttc acaggggcag aagaagaag caagaagaa aagacaaatt  tctctaacca cacaacatga ggtacagac atgtcaciaa gcagtgggtg gagaaatgta  gtccttgggtg taagaacttc agtttctgta ataattgcc tccggcgagc tgtgaaacga  cacctggaac gacgagaaag acaaaagaga gtcttcagga tgcctttatt gattatttct  acatttttc tctgctggac accaatttct gttttaata ccaccatttt atgtttaggc  ccaagtgacc ttttagtaaa attaagattg tgttttttag tcatggctta tggacaacact  atatttcacc cttctattata tgcatttact agacaaaaat ttcaaaaggc cttgaaaaagt  aaaaatgaaa agcgagttgt ttctatagta gaagctgac cccgacctaa taatgctgta  atacacaact cttgatataga tcccaaaaga acaaaaaa ttacctttga agatagtga  ataagagaaa aacgttttagt gctcaggtt gtcacagact ag</p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>TVLVLYCMKS NLINSVSNII TMNLHVLVDVI ICVGCIPITI VILLISLESN TALICCFHEA  CVSEASVSTA INVFAITLDR YDISVKPANR IITMGRVAML MISIWIFSF SFLIPFIEVN  FFSLQSGNTW ENKTLICVST NEYTELGMY YHLLVQIPIF FFTVVMILIT YTKILQALNI  RIGTRFSTGQ KKKARKKKTI SLTQHEATD MSQSSGGRNV VFGVRTSVSV IIALRRRAVKR  HRERRERQKR VERMSLLIIS TFLLCWTPIS VLNITILCLG PSDLLVKLRL CFLVMAYGTT  IFHPLLYAFT RQKFQVLKS KMKRNVSVI EADPLPNNAV IHNSWIDPKR NKKITFEDSE  IREKRLVPQV VTD</p>	Homo sapiens
264	3860	G Protein- Coupled Receptor SLC/MCH1	NM_005297	<p>atgttgtgtc cttccaagac agatggctca gggcactctg gtagattca ccaggaaact A  catggagaag ggaagaaggga caagattagc aacagtgaag ggaggagaga tgggtggaga  ggattccaga tgaacggttg gtcgctggag gctgagcatg ccagcaggat gtcagttctc  agagcaaacg ccatgtcaaa cagccaacgc ttgctcttc ttgccccagg atcacctct  cgacacggga gcatctccta catcaacatc atcatgctt cgggtgttcg caccatctgc  ctcctgggca tcacgggga ctcacgggtc atcttcggg tctggaagaa gtccaagctg  cactggtgca acaacgtccc cgacatcttc atcatcaacc tctcgtagt agatctctc  tttctcctgg gcatgcccct catgatccac cagctcatgg gcaatggggt gtggcacttt  ggggagacca tgtgcaccct catcacggcc atggatgcca atagtcagtt caccagacc  tacatcctga ccgcatggc cattgaccgc tacctggcca ctgtccacc catctcttc  acgaagtcc ggaagccctc tgtggccacc ctgggtgatc gctcctgtg ggcctctcc  ttcatcagca tcaccctgt gtggctgtat gccagactca tcccttccc aggagtgca  gtgggtgcyg gcatacgctt gcccaacca gacactgacc tctactggtt caccctgtac  cagtttttcc tggcctttgc cctgcctttt gtggtcatca cagccgcata cgtgaggatc  ctgcagcgca tgacgtcctc agtggccccc catcgccatc tcttctgtgt cttggcacc  aagaggttga cccgcacagc catcgccatc atcagcgcc cgaccctcac ctttgtctac  tactatgtc tacagctgac ccagttgtcc atcagcgcc gccacagct ctttgtgtac  ttatacaatg cggccatcag cttgggctat gccaaacgt gcccaacc ctttgtgtac  atcgtgtctt gtgagacgtt ccgcaaacgc ttggtcctgt cgggtgaagcc tgcagcccag  gggcagcttc gcgtgtgtcag caacgctcag acggctgacg aggagaggac agaaagcaaa</p>	Homo sapiens

265	3860	G Protein-Coupled Receptor SLC/MCH1	NP_005288.1	gpcacactga MLCPSKTDGS GHSGRIHQET HGEGRDKIS NSEGRENGGR GFQNMGGSLAEHASRMSVL P RAKPMNSQR LLLSPGSP RTGSISYINI IMPSVGTIC LLGIGNSTV IFAVVKSKL HWCNNVPDIF IINLSVDLL FLGMPFMH QLMNGVWHF GETMCTLITA MDANSQFTST YILTAMADR YLATVHPIS TKFRKPSVAT LVICLWALS FISITPWLY ARLIPFGGA VGCGRLEPN DTDLYWFTLY QFFLAFALPF WITAAYVRI LQMTSSVAP ASQRSIRLT KRVTALAI CLVFFVCWAP YYVLQTLQS ISRPTTFVY LYNAAISLGY ANSCLNPFVY IVLCETFRKR LVLSVKPPAAQ GOLRAVSNAQ TADEERTESK GT	Homo sapiens
266	3861	G Protein-Coupled Receptor GPR25	NM_005298	atggccccc cagagccctg gagccccag cggggctcag cggcctgga ctactcggg A ttggacggcc tggaggagct ggagctgtgt ccggcgggg acctgcccta cggctacgtc tacatccccc cgtctacct ggcgccctc cggcgtggcc tggatgacaa cgcctttgtg gtgtggtgc tggcggggc gtgacctggg cttcgtgtc acgtgcgcg tggggcgcg ggcggcggt ctggcgagc tggcgttcg cgatggctc tgaagctca gcaagttcgc gctggcggg aggcgccgt ggcgttcg gctgctggc ggcgtgagc tggaccgcta cctggcggtg acgcgtcgg cggcgccgt gctgctggc gccactgac ccccgccgt ggcgtgtgc gtgaagctgc tggaggcgt gctggcggt cggcgccgc cgtctaccg ggggttgac ggcgtcgg cgtggcgt gctggcggt cggcgccgc cgtccctcc tggctaccg ggggttgac ccctcctg gggccagg cagccagtc ggcagagtc cctccacgc cttccaggc ctcagcttc tctgtgtgt gctgacctc gtgtgcccc tggctgtac cctcttctg tactgcgca tctgcgcg cctgcgacg cgcgcgacg tggctgggc cggaggaaac tcgctgcga tcatcttc cctgcgacg cgtcagagc acgttctgtg gctcctggc gcccttcagc gccctcgg cgtcttcca cctggcggt cctggcggt tggcggtgc gtgccccg ctgctggc tgcgtggg cctcaccat gccacctgc tggccttcg caacagctc gccaacccg tcatctacc cctgctggc cgtcattcc gagccccg gctggacgg gcctcggg gcacggcg cctggcgga aggatcagc cagctcctc gctctccag gacgacagt cgtgttcg ttgcggggt caggcgcg cactgcctc ggcctcctg tag	Homo sapiens
267	3861	G Protein-Coupled Receptor GPR25	NP_005289.1	MAPTEWSPS PGSAPWDYSG LDGLEELELC PAGDLPYGV YIPALYLA AFVGLLGNFV P VWLLAGRRP RRLVDTFVLH LAAADLGFVL TLPMAAAA RRPWPFQDGL CKLSTFALAG TRSAGALLA GMSVDRLAV VKLLEARPLR TPRCAVASCC GWAVALLAG LPSLVYRGLO PLPGGQDSQC GEPSPHAFQG LSLLLLLTF VLPVVTLC YCRISRLRR PPHVGRARN SLRIIFAIES TFVGSWLFP ALRAVFLAR LGALPLCPPL LLALRWGLTI ATCLAFVNSC ANPLYLLD RFRARALDG ACGRTRLAR RISSASSLSR DDSVFRCA QAANTASASW atgatgtgg gtgcaggcag cctctggcc tggctctcag ctggctcag caactgaat A gtaacagc tgggcccag agaggggcc acaggtccag cgcaccact gccctgcct aaggcctgg atgtgtgtc tgcctctca ggcacctgg tgcctcga gaatgcgcta gtggtggcca tcatcgtgg cactcctgc ccatgttcc gctggtggc agcctggcg tggcagacct gctggcagg cttggcctgg tctgcact tctgctgtc ttctgcatc gctcagcga gatgagcgt gtgctggtg gctgctgc aatggcctt accgcccagc tggcagctc actggccatc actgtcagc cttaccttc tctgtacat	Homo sapiens
268	3862	G Protein-Coupled Receptor GPR3	NM_005281	atgatgtgg gtgcaggcag cctctggcc tggctctcag ctggctcag caactgaat A gtaacagc tgggcccag agaggggcc acaggtccag cgcaccact gccctgcct aaggcctgg atgtgtgtc tgcctctca ggcacctgg tgcctcga gaatgcgcta gtggtggcca tcatcgtgg cactcctgc ccatgttcc gctggtggc agcctggcg tggcagacct gctggcagg cttggcctgg tctgcact tctgctgtc ttctgcatc gctcagcga gatgagcgt gtgctggtg gctgctgc aatggcctt accgcccagc tggcagctc actggccatc actgtcagc cttaccttc tctgtacat	Homo sapiens

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	gacctcacct actattcaga gacaacagtg acacggacct atgtgatgct ggcttagtg tggggaggtg ccctgggctt ggggctgtg cctgtgtgtg cctggaactg cctggatggc ctgaccacat gtggcggtgt ttatccactc tccaagaacc atctgtagt tctggccatt gccttcttca tgggtgtttg catcatgtg cagctctacg cccaaatctg cgcctatgct tgccgacctg ccagcagat tgcccttcag cggcacctgc tgcctgcctc ccaatatgtg gccaccgca aggcattgc cacactggc gtgggtgtg gagecttgc cgcctgtgg ttgcccttca ctgtactg cctgtgggt gatgccact ctccactct ctacacat cttacctgc tccctgccac ctacaactc atgataacc ctatcatcta cgccttcgc aaccaggatg tgcagaaagt gctgtgggt gctgtgctg gctgttctc ttccaagatc ccctccgat cccgctccc cagtatgct tag ccttccgat cccgctccc cagtatgct tag	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	MMWGAGSPLA WLSAGSNV VSSVGPAGP TGPAAPLSP KAWDVVLCS GTLVSCENAL P VVAIIIVGTPA FRAPFLIVG SLAVADLLAG LGLVLHFAAV FCIGSAEMSL VLVGVLAMAF TASIGSLLAI TVDRVLSLYN ALTYSETTV TRTYVMIALV WGGALGLGLL PVLAWNCLDG LTTGCVVYPL SKNHLVLA AFFWVGIML QLYAQICRIV CRHAQOIALQ RHLLPASHYV ATRKGIATLA VLGAFACW LPFTVYCLG DAHSPPLYTY LTLIPATYNS MINPIIYAFR NQDVQKVLWA VCCCSSKI PFRSRSPSDV atgccattcc caaactgctc agccccagc actgtgtgtg ccacagctgt ggggtgtctg A ctggggctgg agtgtgggt gggctgtgtg ggaacggg tggcgctgtg gaccttctg ttccgggtca ggtgtgtgaa gccgtacgt gctacactgc tcaactggc cctggctgac ctgctgttg cctgtgtgct gcttctctg ccccttctc actgagcct ccaggcttg catctggcc gtgtgggtg ctgggcccgt cgttctctg tggacctcag ccgacgctg gggatggct tctggccgc cgtggcttg gaccgtacc tccgtgtgtt ccacctcgg cttaaggta acctgtgtc tctcaggcg gccctgggg tctggggct cgtctggctc ctgatggctg cctcacctg cccgggctg ctcatctg agccggcca gaactccac aggtgccaca gtttctact cagggcagac ggctcttca gcatcatctg gcaggagca ctctctgct ttcagttgt cctcccttt ggcctcatg tgttctgcaa tgcaggcatc atcagggtc tccagaaaag actccggag cctgagaaac agccaaagt tcagcggcc caggcactgg tcaacttgt ggtgtgtgtg ttgtctctg tcttctgct cgttctctg gccagagtcc tgatgcacat ctccagaaat ctgggagct gcagggccct ttgtcagtg gctcatacct cggatgtcac gggcagcctc acctacctg acagtgtct caaccctg gtatactgt tctccagccc cacttccag agctctatc ggagggtctt ccacacctc cgaggcaag ggcaggcagc agagccccca gattcaacc ccagagactc ctattctga LLLAACLPEL AAFYLSLQAW HLGRVGCWAL RFLDLRSV GMAFLAAVAL DRYLRVHPR LKVNLSPQA ALGVSGLVWL LMVALTCPL LLSERAAQNST RCHSFYSRAD GSFSIIWQEA LSCLOFLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTLVAVL FALCFPLPFL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSHVNPV VYCFSSPTFR SSYRRVFHTL RGKGAEEPP DFNPRDSYS	Homo sapiens
271	3863	G Protein- Coupled Receptor GPR31	NP_005290.1	MPFPNCAPS TVVATAVGL LGLECGLL GNAVALWTF FVRVWKPYA VYLLNALAD P LLLAACLPEL AAFYLSLQAW HLGRVGCWAL RFLDLRSV GMAFLAAVAL DRYLRVHPR LKVNLSPQA ALGVSGLVWL LMVALTCPL LLSERAAQNST RCHSFYSRAD GSFSIIWQEA LSCLOFLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTLVAVL FALCFPLPFL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSHVNPV VYCFSSPTFR SSYRRVFHTL RGKGAEEPP DFNPRDSYS	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	ctgttgacct tacttatctc tgttgtcttc tggggtctta ggaatgcca gcactccac A ccacattgcc tgaactttcc aacactccct agctgcgtg tgcctatct caacattcc tcatgtattt ctgtgtctt ctagaacatt ccccgccat tattacttca ataggtctac	Homo sapiens

GPR4

acatacttcc taattgcccct goaaaccatc tecttctcac cattgcccag cgatgctttc  
 gtctcctcca taaacactcc cggagaccaa tttttgtgtc acccoatac tccctcgttg  
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 gaactcaagt gaagggcaat cagggcagac tgcctggagg agtgatgcca gaaggtttg  
 gaagaagggt tgggacaaga agaaagggt tttattcatt cattcaacag aggtttatgt  
 agggcactgt gctgggtggg gctggggaca caacaatgac tgaggcagcc tggccttgcc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacaggcc tcaccatata caagtaata aaaaatatgt aatgtttgga attgct IADLLYICTL PLWVDYFLHH DNWIHGPSC KLFGEFFYTN IYISIAFLCC ISVDRYLAFA HPLRFARLRR VKTAVAVSSV VMATELGANS APLFHDLEFR DRYNHTFCFE KFPMEGWAW MNLRYRVFVG LFPWALMLLS YRGILRAVRG SVSTERQEK KIKRLALS LI AIVLVCFAFY HVLILSRSAI YLGRPWDCGF EERVESAYHS SLAFTSLNCV ADPILYCLVN EGARSQVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tcccagggtg tggtagtggc gcccgaagga A gcggcgccgg cgccacacgc agcagggggg cggaatgggg accccctgct gcggcgctc taggagccgg cggcgagctc aatgggtctc tgagctgtc ctcgcagctg tcggctgggc caacgggact cctgctgcca gcgtggaatc cgtgggacgt gctcctgtgc gtgtcgggga cagtgatgc tggagaaaaa gcgtggtgg tggcgtcat cgcgtccact ccggcgctgc gcacgcccc gtctgtgctg taggcagcc tggccacgc tgacctgtg gcggcgctg gcctcatctt gcactttgtg ttccagtact tgggtccctc ggagactgtg agtctgtca cgttgggctt cctcgtggcc tccctgcgc cctctgtcag cagcctgctg gccattacgg tggaccgcta cctgtccctg tataacgcgc tcacctatta ctcgcgcgg acctgttgg ggtgcaact cctgttggcc gcaacttggc ccgtgtccct aggcctgggg ctgctgccc tgctgggctg gaactgctg gcagagcgc ccgctgtcag cgtggtgcgc ccgctggcgc gcagccacgt ggtctgtctc tccgcgcct tcttcattgt cttcgccatc atgctgcacc tgtactgtgc catctgccc gctgtctggc gccacgcga ccagatcgcg ctgcagcgc actgcctggc gccacccat ctcgtgtcca cagaaaagg tgtgggtaca ctggctgtgg tctggggcac ttctggcgcc agctggctgc ccttcgccat ctattgctg gtggcagcc atgaggacc gcggtctac acttacgcca cctgtgtgc cgcacctac aactccatga tcaatcccat catctatgcc ttccgcaacc aggagatcca gcgcgcctg tggtcctgc tctgtggctg tttccagtcc aaagtgcct ttcgttccag gtctccagc gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	gaggtctga SAGPGLLLP AVNPWDVLLC VSGTVIAGEN ALVVALLIAT PALRTPMFVL VGSLATADLL AGCGLIHFFV FQYLVPSETV SLLTVGFIVA SFAASVSSLL AITVDRYLSL YNALTYSRR TLLGVHLLA ATWTVSLGLG LLPVLGNCL AERRACSVR PLARSHVALL SAAFFMVFGI MLHLYVRICQ VVWRHAHQIA LQQHCLAPPH LAATRKGVT LAVVLGTFGA SWLPFAIYCV VGSHPDPAV TYATLLPATY NSMINPIYA FRNQEIQRAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaaac cctcgttctc ggagccctgg ccgcaccaac catcgggcc ggaccggcg A ctgagctgct ccaacgcgc gactctggcg ccgctgccc gcgcgtggc ggtgctgta ccagtgtct acgcggtgat ctgcgccgtg ggtctggcg gcaactccgc cgtgctgtac gtgttgctgc gggcgcccc catgaagacc gtaccaacc tttcatcct caacctggcc atcgccgac agctcttcc gctggtgctg cccatcaaca tcgccgactt cctgctgctg cagtggccct tcggggagct catgtgcaag ctatcgctgg ctatcgacca gtacaaacc	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p>ctgataaactt gccgcgcgc agcctga</p> <p>ttctccagcc ttacttctt caccgtcatg agcgccgacc gctacctggt ggtgttgccc</p> <p>actgcggagt cgcgcgggt gccgcgcgc acctacagcg cgcgcgcgc ggtgagcctg</p> <p>gccgtgtggg ggatcgtcac actcgtcgtg ctgcctctcg cagtcttcgc cccgctagac</p> <p>gacgagcagg gccgcgcgcca gtgcgtgcta gtctttccgc agcccgaggc cttctggtgg</p> <p>cgcgcgagcc gccctacac gctcgtgctg ggcttcgcca tcccgtgtc caccatctgt</p> <p>gtcctctata ccacctgct gtgcgggtg catgccatgc ggctggacag ccacgccaag</p> <p>gccctggagc gcgccaagaa gcgggtgacc ttctgtgtgg tggcaatcct gccgtgtg</p> <p>ctcctctgct ggagcccta ccaactgagc accgtgtgtg cgtcaaccac cgacctccg</p> <p>cagacgcgc ttggtcatcgc tatctctac ttcatcaca gctgacgta cgccaacagc</p> <p>tgcctcaacc ccttctcta cgccttctg gacgceagct tccgcaggaa cctccgccag</p> <p>ctgataaactt gccgcgcgc agcctga</p> <p>MDNASFSEP PANASGPDPA LSCSNASTLA PLPAPLAVAV PVVYAVICAV GLAGNSAVLY P</p> <p>VLLRAPMKT VTNLFILNLA IADELFTLVL PINIADFLR QWPFELMCK LIVAIDQYNT</p> <p>FSSLYFLTM SADRYLVWLA TAESRRVAGR TYSARAVSL AVWGIVTLV LPFAVFARLD</p> <p>DEQRRQCVL VFQPEAFW RASRLYLVL GFALPVSTIC VLYTLLCLR HAMRLDSHAK</p> <p>ALERAKRVT FLVVAILAVC LLCWTPYHLS TWALTDLDP QTPLVIAISY FITSLTYANS</p> <p>CLNPFLYAFI DASFRNLRLQ LITCRAAA</p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p>atgcaggccg ctgggcaccc agagccctt gacagcagg gctccttctc cctccccacg A</p> <p>atgggtgcc aactctctca ggacaatggc actggcaca atgcacatt ctcgagcca</p> <p>ctgccgttc tctatgtct cctgcccgc gtgtactgct ggtactgtg tgtggggctg</p> <p>actggcaaca cggcgctcat cctgtaatc ctaaggcgc ccaagatgaa gacggtgacc</p> <p>aacgtgttca tctgaaactt ggccgtgccc gacgggtctt tcacgtgtg actgcccgtc</p> <p>aacatcgccg agcactgct gcagtactgg ccttcgggg agctgctctg caagctgggt</p> <p>ctggcgtcg accactacaa catcttctcc agcatctact tctagccgt gatgagcgtg</p> <p>gaccgatacc tgggtgtgct ggccacgtg aggtcccgc acatgccctg gcgcacctac</p> <p>cggggggcga aggtcgccag cctgtgtgc tggctggcg tcacggtctt ggttctgccc</p> <p>ttcttctt tgcgtggcgt ctacagcaac gagctgcagg tcccagctg tgggctgagc</p> <p>ttccgtggc ccgagcgggt ctggttcaag gccagcgtg tctacactt ggtcctgggc</p> <p>ttcgtgctgc cegtgtgcac catctgtgtg ctctacacag acctcctgc caggctgcg</p> <p>gccgtggcgc tccgtcttgg agccaaggct ctaggcaagg ccaggcgga ggtgaccgtc</p> <p>ctggtcctcg tegtgtgccc cgtgtgccc cctgctgga cgccttcca cctggcctt</p> <p>gtcgtggccc tgaccacgga cctgcccag accccactg tcatcagat gtcctacgtc</p> <p>atcacagcc tcaactacgc caactcgtg ctgaacctt tctctacgc cttctagat</p> <p>gacaaacttc ggaagaactt ccgcagcata ttgcgtgtct ga</p> <p>MQAAGHPEPL DSRGSFSLPT MGVNSQDNG TGHNTAFSEP LPFLVLLPA VYSGICAVGL P</p> <p>TGNTAVILVI LRAPMKTVT NVFILNLAVA DGLFTLVLPV NIAEHLQYW PFGLLCKLV</p> <p>LAVDHYNIFS SIYFLAVMSV DRYLVVLATV RSRHWPRTY RGAKVASLCV WLGVTVLVLP</p> <p>FFSEAGVYSN ELQVPSGLS FFWPVRWFK ASRVYTLVLG FVLVCTICV LYTDLLRRLR</p> <p>AVRLRSGAKA LGKARRKTV LVLVLAACL LCWTFPHLAS VVALTTDLPO TPLVISMVY</p> <p>ITSLTYANSC LNPFYAFID DNRKFRSI IRC</p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1		Homo sapiens

280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgctccat cggactcact agccgcactc atgaatcgcc accatctgca ggatcacttt ctggaatag acaagaagaa ctgctgtgtg ttccgagatg acttcattgc caaggtgttg ccgcgggtgt tggggctgga gtttatcttt gggcttctgg gcaatggcct tgcctgtgg attttctgtt tccacctcaa gtcctggaaa tccagccgga ttttctgtt caacctggca gtactgact ttctactgat catctgcctg ccgttcgtga tggactacta tgtcgcgct tcagactgga actttggga catcccttg cggctgggtg tcttcattgt tgcctgaac ccgacggga gcatactct cctcaggtg gtggcggtag acaggtattt ccgggtgttc cctccacc acccctgaa caagatctc aattggacag cagccatcat ctcttgctt ctgtgggga tcaatgtgtg cctaacagtc cacctcctga agaagaagt gctgatccag aatggcctg caaatgtgtg catcagctc agcatctgcc atacctccg gtggcacgaa gctatgttc tctggagtt cctcctgcc ctgggcata tctgttctg ctacgccaga attatctgga gctgcggga gagacaaatg gaccggcatg ccaagatcaa gagagccatc accttcata tgggtgtgg catctctt gtcatctgct tcttcccg cgtggtgtg cggatccgca tctctggct cctgcacact tcgggcacgc agaattgtga agtgaccgc tcggtgacc tggcgttctt tatcactctc agcttcacct acatgaacag catgctggac ccgtgtgt actactctc cagcccatc ttcccaact tcttctccac ttgatcaac cgctgcctcc agaggagat gacaggtgag ccagataata accgcagcac ggcgtcgag ctacacggg acccaacaa aaccagaggc gtccagagg cgttaattgc caactcgggt gagctatgga gccctctta tctgggcca acctcaata accttccaa gaaggacat tgtcaccaag aaccagcat tctggagaaa cagttgggt gttgcatcga gtaatgtcac tggactcggc ctaagggttc ctggaacttc cagattcaga gaattgatt taggaaact gtggcagatg agtgggagac tgggtgcaag gtgtgaccac aggaatcctg gaggaacaga gactaaagt tctaggcatc tgaacttgc ttcatctctg acgtcgcag gactgaagt gggcaaatg tagcggttc tctgagcag agttggagcc agagatctac ttgtgactg ttggcctct tccacatct gctcagact ggggggggt cagctcctcg ggtgatatct agcctgcttg tgagctctag cagggataag gagagctgag attggaggga attgtgttc tctggagga agccaggga tcattaaaca agccagtgg taccctggt tccgtggac aattcatct tcagacaagc tttagagaaa tggaactcagg gaagagactc acatgcttg gtagtatct gtgttcccg tgggtgtaat aggggattag cccagaaagg gactgagta aacagtta ttatgggaaa ggaatggca ttgctgctt caaccagca ctaatgcaat ccattcctt ctgtttata gtaactaaag ggttgagcag ttaaacggc ttcaggatag aaagctgtt cccactgtt tegtttacc attaaaagg aaactgcct ctgcccacg gtagagagg gtgcaggtc ctcctggtc cttcgctgt gttctgtac ttacaaaaa tctaccact caataaatt tgataggaga caaaaaaaa a	Homo sapiens
281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	LEIDKNCVV FRDDFIKVL PPVLGLEFIF GLNGLALW IFCFLKSWK P SSRIFLENLA VADFLIICL PFVMDYYVR SDWNGDIPC RLVLFMFAMN RQSIIFLT VAVDRYFRV HPHALNKIS NWTAAIISCL LMGITVGLTV HLLKKLLIQ NGPANVCISF SICHTFRWHE AMFLLEFLP LGIILFCSAR IWSLRQRM DRHAKIKRAI TFIMVVAIVE VICFLPSVV RIRIFWLLHT SGTQNCVYR SVDLAFFITL SFTYMNMLD PVIYFSSPS FPNFFSTLIN RCLQKMTGE PDNRRSTVE LTGDPNKTGR APEALMANSR EPWSPSYLGP	Homo sapiens



282	3870	G Protein- Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCIE. atggggaaca tcactgcaga caactcctcg atgagctgta ccatcgacca taccatccac A cagacgtgg ccccggtggt ctatgttacc gtgctggtgg tgggcttccc ggccaactgc ctgtccctct acttcggcta cctgcagatc aaggcccgga acgagctggg cgtgtacctg tgcaacctga cgggtggcga cctcttctac atctgtcgc tgcctttctg gctgcagtac gtgctgcagc acgacaactg gtctcaggc gacctgtcct gccaggtgtg cggcattctc ctgtacgaga acatctacat cagcgtgggc ttctctgtct gcatctcgt ggaccgctac ctggctgtgg cccatccctt cgccttccac cagtccgga ccttgaaggc ggccgtcggc gtcagcgtgg tcatctgggc caaggagctg ctgaccagca tctacttctt gatgcacgag gaggtcatcg agacgagaa ccagcaccgc gtgtgctttg agcactacc catccaggca tggcagcgcg ccataaacta ctaccgttc ctggtgggtct tctcttccc catctgcctg ctgctggcgt cctaccaggg catctgcgc gccgtgcgc ggagccacgg caccagaag agcgcgaag accagatcca gcggtggtg ctacgacgc ttggtcatctt cctggcctgc ttctgcctt accagtgtt gtgctggtg cgcagcgtct gggaggccag ctgcgacttc gtcagggcg ttttcaagc ctaccacttc tctctctgc taccagctt caactgcgc gccgaccccg tgctctactg ctctgtcagc gagaccacc accggacctt ggcccgcctc cgcggggcct gccctggcctt cctcacctgc tccaggaccg gccggggcag ggaggcctac ccgctgggtg ccccgaggc ctccgggaaa agcggggccc aggtgagga gcccgagctg ttgaccagc tccaccgcg cttccagacc cctaactgc cagggtcggg cgggttcccc acgggcaggt tggcctag 5' MGNITADNSS MSCITDHTIH QTLAPVVVT VLVGFPPANC LSLYFGYLIQI KARNELGVYL P CNLTVDLFY ICSLPFWLQY VLQHDNWSHG DLSCQVCGIL LYENIYISVG FLCISVDYR LAVAHPRFH QFTLKAAG VSVWIWAKEL LTSIYFLMHE EVIEDENQHR VCFEHYPIQA WQRINYYRF LVGLFPICL LLASYQGILR AVRRSHGTQK SRKDIQIRLV LSTVWIFLAC FLPYHVLLLV RSVWEASCDF AKGVENAYHF SLLTSENCV ADPVLYCFVS ETTHRDRLARL RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens
283	3870	G Protein- Coupled Receptor OGR1	NP_003476.1	agcaagtga ggcacagacg caggggacag gagagcctgg gcaagactgg agagcccaga A cctgggatgg cggattcgtg caggaacctc acctactgc ggggctcggg gggccgggccc accagacccc tgatgttcgt ggcctggtgt gtgggcaacg ggcctggcctt ggccatcctg agcgaacggc gaccggcgcg cccctcgcc ttgcgggtgc tggtaaccgg actggcggcc accgacctgc tgggcaaccg ctctctgagc ccggcctgt tctgtggcta tgcgcgcaac agctccctgc tgggacctgc ccgagggcgc ccgcccctgt gcatgacctt cgccttcgccc atgaccttct tggcctggc gtccatgtct atctctttt ccatggcctt ggagcgtgc ctggcgctga gccaccccta cctctacgag cagctggagc ggcccgcctg cgcgcgcctg gcgtgccag ccatctacgc ctctgtcgc ctctctgtgc cgtgtcccc gctgggctg ggccaacacc agcagtactg ccccggaagc tgggtcttcc tccgcatgag ctggggccag ccggggcgcg ccgcttctc gctggcctac gccggcctgg tggccctgct ggtggtctgc atcttctct gaacggctc ggtcacctc agcctctgc gcatgtacc ccagcagaag cgccaccagg gctctctggg tccacggcg cgacacggag aggacaggtt ggaccacctg	Homo sapiens
284	3921	Prostacyclin Receptor	NM_000960		Homo sapiens

285	3921	Prostacyclin NP_000951.1 Receptor	atctgtgtgg cccatcatgac agtggtgcatg gccgtgtgtgt ccttgccctct cactgacgcg tgcttcaccc aggtgtgtgc ccttgacagc agcagtga gaaggagacct ccttgccctc cgcttctacg ccttcaaccc catcctggac ccttggtgtct tcatcctttt ccgcaaggtt gtcttccagc gactcaagct ctgggtgtgc tgcctgtgtcc tgggacctgc ccacggagac tcgcagacac ccttttccca gctgcctcc tgcgtgtgctt gggcgaggg acccaagggc cccctctgt cctgtgggaa agggagggag ctgcgtgctt tgcgtgctt gggcgaggg gcaggtggag cccttgccctc ccacacagca gtccagcggc agcgcgtgtg gaacgtgtc caaagcagaa gccagcgtcg cctgctccct ctgctgacat tccaagctga cctgtgac tctgcccgt cttcggggcga caggagccag aaaaacaggg acatggctga tggctgcgga tgcgtgaacc ttggccccc aactctgggg ccgacagct gctgtttctc ctgcggcagg gcagtcgtg ctggctctgg gaagagagtg agggacagag gaaacgttta tctgggagtg cagaaagaat ggttctctca aaataaccag tggcctggcc gacctgtctt ggcctggat tccccatca tctcattgtc taaatattta gaaggcggag agttccctc aggttctgt acagtcaggt ctgctctgtg ctgggtgtg gctccaatct gctgccactt agggagccca actgccacc ccaagtccc aggggatggc cctcccctc taccagcca ctccaagagc cagccccctt tctgtccac aaaaaccaca gttattgaa aggtccctg ccttccctg ccgctgttcc ccaaccaggc ttgggagccc tggcatccca agggggaac gggaggaagg ggagctgct gcattgtggg tgatgacgta ggacatgtgc ttggtacaaa aagggcctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin D2 Receptor	LLGTSFLSPA VFVAYARNSS LLGLRGGPA LCDAFAMT FFLASMLIL FAMAVRCLA LSHEPLYAQL DGPRCARIAL PAIYAFVLF CALPLLGLQ HQYCPGSGW FLRMWAQPG GAAFSLAYAG LVALIVAIF LCNGSVTLISL CRMVROQKRH QGSLGPRPRT GEDEVHLLIL LALMTVMMAV CSLPLTIRCF TQAVAPDSSS EMGDLAIFR YAFNPILDPW VFILFKAVF QRLKLWVCCCL CLGPAHGDSDQ TPLSQLASGR RDRAPSAFV GKEGSCVPLS AWGEGQVEPL PPTQQSSGSA VGTSSKAERAS VACSLC gctgtgcaac ctgcggcgca tgcgaacct ctatgcgatg caccggcggc tgcagcggca A ccgcgcctcc tgcaccaggg actgtgccga gccgcgcgcg gacgggaggg aagcgtcccc tcagccctctg gagagctgg atcacctctt gctgtgtggc ctgatgaccg tgccttccac tatgtgttct ctgcccgtaa tttatgcgcg tttactatga gcatttaagg atgtcaagga gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgatttc tatctgtgat ttcaattgtg gacccttggg tttttatcat tttcagatct ccagttattc ggatatttt tcacaagatt ttcattagac ctcttaggta caggagcggc tgcagcaatt ccactaacat ggaaatccagt ctgtgacagt gtttttctact ctgtgtgtaag ctgagggaata tgtcacattt tcagtcaaaag aacca	Homo sapiens
287	3923	Prostaglandin D2 Receptor	MKSPFYRCQN TTSVEKGNSA VMGGVLFSTG LLGNLLALGL LARSGLWCS RRRLRLPSV P FYMLVCGLTV TDLLGKCLLS PVVLAAYAQN RSLRVLAPAL DNSLQAFAP FMSFFGLSST LQLLAMALEC WLSLGHPPFY RRHITRLGA LVAPVVSFAS LAFCALPMFG FGKFTVQYCPG TWCIFIQWHE EGSLSVLGYS VLYSSIMALL VLATVLCNLG AMRNLYAMHR RLQHRPSCT RDCAEPRADG REASQPLEE LDHLLILLALM TVLFTMCSLP VIYRAYYGAF KDVKENRST EEAEDLRALR FLSVISIVDP WIFIFRSPV FRIFHKIFI RPLRYRSRCS NSTNMESL	Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p>gggggcggca gggctgagc ggcggtgat gggacccac atccaggca gtgccggcac ccctggcgc tgacatgag ccttgccggc cctcaacct gagctggcg ggcgaggca ccacatgcg ggcgcctcg gtcccaaca cgtgcgcgt gcgcgctcg ggcgcttcgc ccgcctgcc catcttctc atgacgctg gcgcgctgc caactgctg gcgctggcg tgctggcga ggcgcggcg cgcctggac ggcgcgctc ggcaccacc ttctgctgt tcgtggccag cctgtggcg accgacctg gggccactg gaccggcg gcgctggcg tgctctgta cactggggg cgcgctcgg ccggcgggg ctgccactc ttggcggtc gcatggtctt ctccggcctg tgcccctgc tgctgggctg tgcatggcg gtggagcgt gcgtggcgt cagcgggcg ctgctccag ccgcgggggt ctgggtcgc cgcgcgcg tgcgctggc cgcggtggc gcggtggct tgccctggc gctgctgcg ctggcgcg tgggcgcta tgagtgag cctgtggc taccgggca cgtggtgct catggcctg ggtcccg gcgctggcg ccaggcactg cttgtggc tctggcag cctggcctg gtcgcgtcc tcgcgcgct ggtgtgca acgctcag ccgtggcct gcatcgcc cgtggcgac gccgtccc cgcgctcc cgcgctcag gcccgcag ccggcgtgc tggggggcg acggacccc ctggcctcc gctcgtcc cctgctcc cgttcggc tccacctt ttggcgctc tggagcag gctcggcg gcagagctc cgcacagc gtggagatg tgggcgact tgcggtatc atggtggtg cgtcatctg ctggagcca atgctggtg tggtggcgt gccgctgc gctggagct ctactcct gcagcgcca ctgttcttg ccgtgcgct tgctcctg aaccagatc tggacctg ggtgtacat ctactgcg agccgctgt gcgcaactg cttcgcctt tgccccgag ggcggagcc aagggcgcc ccgcggggt ggcctaaca ccgagcct gggagggcag ctgctgcg agtcccgcc acagcgct cagccactc taagcaca cagagggcca acgactaag cagccacc tgggtggcg ccaggtgcg ggcgcagc cttgggaat aaaaagccat tctgcg MSPCPLNLS LAGEATTCAA PWPNTSAVP PSGASPALPI FMTLGAVSN LIALALLQA P AGRLRRRSA TTFLLFVSL LATDLAGHVI PGALVRLYT AGRAPAGGAC HFLGGCMVFF GLCPILLGCG MAVERCVGVT RPLLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE LQYPTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRSR PPASGPD SR RWGAHGPS ASASSSIA SASTFFGSR SSGSARRARA HDVEMVGLV GIMVSCICW SPMLVLVALA VGGWSSTSIQ RPLFLAVRLA SWNQILDPTV YILLRQAVLR QLLRLLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF</p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p>gggcccgcgt cggcgcgctg ggtggggaa ggggctctg gatttcggt cctccctttt A ttctctgag tctcggaag ctccagctc cagacctct tctcccgag taaaggcgg gagaggagg cgcactctt ttccaggcac ccacccatg gcaatgcctc caatgactcc cagctctagg actgcgag cgacagtggt cttcccccag gcgaagccc agccatcagc tccgtcatgt tctcgcccg ggtgctggg aacctatag cactggcgt cttgttccac cgtggcggtg gggacgtgg gtgcagcgc ggcgcagga gctccctc cttgttccac gtgtgggtga ccgagtggt gttaccgac ctgctcgga cctgcctcat cagccagtg gtactggctt cgtacgcg gaaccagacc ctggtggcag tggcgccga gagcgcg tgacctact tgccttcgc catgacctt ttacgctgg ccacgatgt catgctctc gcaatggccc tggagcgcta cctctgac cctccacct acttctacca gcgcgcgtc tcggcctccg ggggcctggc cgtgctgct gtcactatg cagtctcct gctctctgc</p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956		Homo sapiens

291	Prostaglandin E Receptor EP2	NP_000947.1	3925	<p> tgcgtgcgc tgcgtgacta tgggcagtag gtccagtagt gccccgggac ctggtgcttc  atccggacg ggcggaccg ttacctgcag ctgtacgcca cctgtctgct gcttctcatt  gtctcgtgc tgcctgcga cttcagtgct attccaacc tcaccgcac gcaccgcga  agccggagaa gccgtgcgg accctccctg ggcagtgccc gggcgggccc cctggctatc  aggagagggg aaagggtgc catggcggag gagacggacc accctattct cctggctatc  atgaccatca ccttcgccgt ctgctccttg ccttccacga ttttgcata tatgaatgaa  acctttccc gaaggaaaa atgggacctc caagctctta ggtttttatc aattaattca  ataattgacc ctgggtctt tgcctcctt aggcctctg tctgagact aatgcgttca  gtcctctgtt tgcggatttc attagaaca caagatgcaa cacaacctc ctgttctaca  cagtcagatg ccagtaaaaca ggtgacctt tgcgtcagat agtttaaaa ttcttagtta  tatagcatct ggaagatcat ttgaaattg ttccctggag aaatgaaaac agtgtgtaaa  caaatgaag ctgccctaat aaaaggagt atacaacat ttaagctgtg gtcaaggcta  cagatgtgct gacaaggcac ttcatgtaaa gtgtcagaag gagctacaaa acctaccctc  aatgagcatg gtacttgccc ttggaggaa caatcggctg cattgaagat ccagctgcct  attgatttaa gcttctcgt tgaatgacaa agtatgtggt ttgttaattt gtttgaacc  ccaaacagtg actgtacttt ctattttaat ctgtctacta cgtttataca catatagtgt  acagccagac cagattaaac ttcatatgta atctctagga agtcaaatatg tggaaagcaac  caagcctgct gtcttgtagt cacttagcga acccttattt tgacaataga agttgaaaat  cataggcacc ttttactgtg atgtttgtgt atgtggagt actctcatca ctacagtatt  actcttaca gagtggaact agtgggttaa catcagtttt ttttactcat cctccaggaa  ctgcaggtca agtgtcagg ttattttatt tataatgtcc atatgctaag agtgcataag  aagactttag gaatggttct ctcaacaaga aataatagaa atgtctcaag gcagttaatt  ctcataata ctcttattat cctatttctg ggggaggatg tacgtggcca tgtatgaagc  caaatattag gcttaaaaa tgaaaaatct ggttcaattct tcagatatac tggaaacctt  ttaaagtga tatggggcc atgagtaaaa tagattttat aagatgactg tgttgtaaca  aaattcatct gtctatatct tatttagggg aacatggttt gactcatctt atatgggaaa  ccatgtagca gtgagtcata tcttaataata ttctcaaatg ttgggcatgt aaatgtaaac  tcagcatcaa aatatttcag tgaatttgca ctgtttaatc atagttagt tgtaaaactca  tctgaaatgt tacaataata aactataaaa ca  </p>	Homo sapiens
292	Prostaglandin E2 Receptor EP3	L32662	3926	<p> MGNANDSQS EDCETROWLP PGESPAISSV MFSAGVLGNL IALALLARRW RGDVGSAGR P  RSSLSLFHVL VTELIVFTDLL GTCLISPVVL ASYARQTLV ALAPESRACT YFAFAMTFES  LATMLMLFAM ALERYLSIGH PYFYQRRVSA SGLAVLPVI YAVSLLFCSL PLLDYGQYVQ  YCPGTWCFIR HGRAYLQLY ATLLLLIVS VLACNFSVIL NLIRMHRRSR RSRCGPSLGS  GRGGPGARRR GERVSMAEET DHLILLAIMT ITFAVCSLPF TTFAYMNETS SRKEKWDLQA  IRFLSINSII DPWFVAILRP PVLRLMRSLV CCRISLRTQD ATQTSCTSQS DASKQADL  atgagaaaaa gaagactcag agagcaagag gaattttggg gaataataa A  </p>	Homo sapiens
293	Prostaglandin E2 Receptor EP3	NM_000957	3926	<p> accagaggtt tccagagag gaaggcgtgg ctccctccc ggccagtag ccttggcgcc A  gcccgggccg cgttcccagc agcggagtag ggcggcggtt ggcgccgca ccatggggg  cagccagcc ccagccgagg taaacgcga cctccgccc gcgccgccc gcgtctgccc  </p>	Homo sapiens

294	Prostaglandin E2 Receptor EP3	NP_000948.1	3926	<p> cctccccgtg cggtctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag  acccggggtc acggaggga tgcccccttc tgcaccgcc tcaaccactc ctacacaggc  atgtgggcgc cggagcgttc cggcaggcg cggggaacc tcacgcgcc tccagggtct  ggcaggattt gggatcggtt gtcgctggcc tccccatca ccatgtctct cactggtttc  gtgggcaacg cactggccat gctgctcgtg tcgcaagct accggcgccg ggagagcaag  cgcaagaagt ccttctctgt gtgcatcgcc tggtggcgc tcaccgacct ggtcgggcag  cttctacca cccgggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc  gaccgtcgg gggtgctctg cactttttc gggtgacca tgactgtttt cgggctctcc  tcgttttca tggcagcgc catggcgtc gaggcgccg tggccatcag ggcgcgcac  tggtatcgga gccacatgaa gacgcgtgcc accggcgtg tctgctcgg cgtgtggctg  gccgtgctcg ccttcgccct gctgcgggtg ctggcggtgg gccagtacac cgtccagttg  cccgggacgt ggtgcttcat cagcacgggg cgagggggca accggactag ctcttcgeat  aactggggca accttttct cgcctcgtcc ttgctctcc tggggtctct ggcgctgaca  gtcacctttt cctgcaacct ggccaccatt aaggccctgg tgcctcgtg ccgggccaag  gccacggcat ctcagtccag tgcccagttg ggcgcataca cgcaggagac ggccattcag  cttatgggga tcatgtcgt gctgtcgtc tgctgtctc cgtcctctat aatgatgttg  aaaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa  gaatgcaact tctcttaat agctgttcgc ctggcttcac tgaccagat ctggatctct  tggttttacc tctgtttaag aaagatcctt ctccgaagt ttgcccagat gagaaaaaga  agactcagag agcaagatgt gggcctctgt ggaagtggt ttgtctatgc atggaggcag  gtcccagga cttggtgcag ttctcatgat agagaacctt cgaagtgtcca gctaaagtga  tgacttgaag ataaatctgc ctaaccctgg gatgaagtat ctgtgaacta ttttgacagc  agatgaggaa ttttgggga ataaaaact gccttctgc caggatcaca tcaactggaag  ctccatgact ctctttttgt aaaaagaaaa aaaaatcacag aaacacccac ctccaaact  attctctttt actctctccc ccaagccac ccccaaatat aactgttatc cagaagctgt  tatgtcctgt tccatacat gttttgtac ttttactata tctacataca tcaattaaac  ttatgtccta ttgttttgt aatttatatt tgcgtataca ttatcatatg taaaatttgc  atttttttat tgaataattat gttctctgag atttatccac attgaaacat ggagctctaa  atcgttaatt ttaaccgcta tagagtattc cataatttga ataaagcata attgtttgt  ac </p>	Homo sapiens
295	Prostaglandin E Receptor EP4	NM_000958	3927	<p> cggcacagcc tcaacactga acgctgtcct cccgagacg agaccggcgg gcaactgcaaa A  gctgggactc gcttttgaag gaaaaaaat agcagtaga aatccagca ccattcttca  ctgaccacac ccgctgcacc tctgtttcc caagtttttg aaagtggca actctgacct  cgggtgtccaa aaatcgacag ccactgagac cggcttttga agccggaaga ttggaagtt </p>	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	MSTPGVNSSA SLSPDRLNSP VTIPAVNFIF GVGNLVAIV VLCKSRKEQK ETTFYTLVCG P LAVTDLLGTL LVSPVTIATY MKGQWPGGQP LCEYSTFILL FFSLSGLSII CAMSVERVILA INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPDWTWC FIDWTTNVT HAAYSVMYAG FSSFLILATV LCNVLVCGAL LRMRQFMRR TSLGTEQHHH AAAASVASRG HPAASPALPR LSDFRRRRSF RRIAGAEIQM VILLIATSLV VLICSIPLV RVFNQLYQP SLEREVSKNP DLQAIRIASV NPILDPIYI LLRTVLISKA IEKIKCLFCR IGSRRERSG QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLLPDLS LPDLSENGLG GRNLLPGVPG MGLAQEDTTS LRTLRISETS DSSQGDSESL VLLVDEAGGS GRAGPAPKGS SLQVTFPSET LNLSEKCI	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	ggcggcggggc gccatggcac accgagcggc tccgtcttct gctcctcaga gagcccggt A ggcggcctcg gatgacaaga tgcctggact gcaatcctgc acagtcttga gagggagatg acttgagtgg ttggctttta tctccacaac aatgtccatg acaattcca acagctagt	Homo sapiens

gtctcctgca gctgpgcttc ttccaacac aacctgccag acggaaaacc ggctttccgt  
atTTTTtca gtaattcttca tgacagtggg aatcttgtca aacagccttg ccatcgccat  
tctcatgaag gcataacaga gatttagaca gaagtccaag gcacgtgttc tgcttttggc  
cagcggcctg gtaatcactg atttcttttg ccatctatc aatggagcca tagcagtatt  
tgtatatgct tctgataaag aatggatccg ctttgacca tcaaatgtcc ttgacagtat  
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cattgagggg tgtattggag tcacaaaacc aatatctcat tctacgaaaa ttacatocaa  
acatgtgaaa atgattgtta gtggtgtgtg cttgttgtct gtttctatag ctttgtgccc  
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cttagccctt ggtgtttcat tgttgtgcaa tgcaatcaca ggaattacac ttttaagagt  
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taattgagac tttttcttg cttgtttgtg taattcaacc aaaagaattt caatacccat  
tcaaatgtc ctaggcttat cagaaatttag ggaaggtagt cotgctttat aataggaaaa  
tgtatttctg tataagattt ctttgcttct attaaaaatg ggattcattt aaaaattaat  
ctttccctgt taggtgatt tcagattctc taggaaatct ggtgaagtaa ccagaagact

298	Prostaglandin F2-alpha Receptor	NP_000950.1	MSMNSKQLV SPAAALLSNT TCQTENRLSV FFSVTFMTVG ILSNSLAIAI LMKAYQRFHQ P KSKASFLLLA SGLVITDFFG HLINGAIAVF VYASDKEWIR FQSNVLCISL FGICMVFSGL CPLLLGSVMA IERICIGVTKP IFHSTKITSK HVKMMLSGVC LFAVFIALLP ILGHRDYKIQ ASRTWCIFYNT EDIKDWEDRF YLLLFSEFLG LALGVSLCN AITGITLLRV KFKSQHRQG RSHHLEWVIQ LLAIMCVSCI CWSPFVLTMA NINGNHNLSL ETCETTLFAL RMAWNLQILD PWVYILLRKA VLKNLYKLAS QCCGVHVVISL HIWELSSIKN SLKVAAISES PVAEKSAST	Homo sapiens
3928	Proteinase-Activated Receptor 2	NM_005242	cggeccgccc tggggaggcg cgcagcagag gctccgattc ggggcagggt agaggtgac A ttctctcgg tgcgtccagt ggagctctga gtttcgaatc ggtggcgccg gattccccgc gcgcggcgcg tgggggcttc caggaggatg cggagcccca gcgcggcggt gctgctgggg gcgcgcctcc tgcagcagc ctctctctcc tgcaagtggca ccatccaaag aaccaataga tcctctaaag gaagaagcct tattggtaaag gttagatggca catccacgt cactggaaaa ggagttacag ttgaacacgt ctttctctgt gatgagtttt ctgcatctgt cctcactggga aaactgacca cggctctcct tccaattgtc tacacaaattg tgtttgtggt gggtttgcca agtaacggca tggccctgtg ggtctttctt ttcgaacta agaagaagca cctgctgtg attacatgg ccaatctggc ctggctgac ctctctctctg tcacttggtt cccctggaag attgcctatc acatacatgc caacaactgg atttatggg agctctcttg taatgtgctt attggctttt tctatggcaa catgtactgt tccattctct tcatgacctg cctcagtgtg cagaggtatt ggggtcactgt gaaccocatg gggcactcca ggaagaaggc aaacattgcc attggcatct cctggcaat atggctgctg attctgctgg tcaccatccc ttgtatgtc gtgaagcaga ccatcttcat tctgcccctg aacatcacga cctgtcatga tgtttgcct gagcagctct tgggtggaga catgttcaat tacttctct ctctggccat tgggtctctt ctgttccccag ccttctcac agcctctgcc tatgtgctga tgatcagaat gctgcatct tctgcatgg atgaaaactc agagaagaaa aggaagaggg ccatcaaat cattgcact gtcctggcca tgtacctgat ctgcttcat cctagtaacc ttctgctgt ggtgcattat tttctgatta agagccaggg ccagagccat gtctatgccc tgtacattgt agccctctgc ctctctaccc ttaacagctg catcgacccc ttgtctatt actttgttc acatgatttc agggatcatg caaagaacgc tctctttgc cgaagtgtcc gcactgtaaa gcagatgcaa gtatccctca cctcaagaa acactccagg aaatccagct cttactcttc aagttcaacc actgttaaaga cctcctattg agtttccag gtcctcagat gggaattgca cagtaggatg tggaacctgt ttaatgttat gaggacgtgt ctgttatctt ctaatcaaaa aggtctcacc acataccacc g	Homo sapiens
4051	Proteinase-Activated Receptor	NP_005233.2	MRSPSAWLLL GAAILLAASL SCSTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVETVFS P VDEFSASVLT GKLTTFVLP I VYTVFVUGL PSNGMALWVF LFRTKKHPA VIYMANLALA	Homo sapiens



Receptor 2	301	4052	Proteinase- Activated Receptor 3	NM_004101	<p> DLSVIVFPL KIAHYIHANN WIYGEALCNV LIGFFYGNMY CSILFMTCLS VQRYWVIVNP  MGHSRKKANI AIGISLAIWL LILLVTIPLY VKQTIPIPA LNIITCHDVL PEQLLVGDMF  NYFLSLAIGV FLFAFLTAS AYVIMIRMLR SSAMDENSEK KRKRAIKLIV TVLAMYLICF  TPSNLLLVWH YFLIKSQGS HVYALYIVAL CLSTLNSCID PFVYFVSHD FRDHAKNALL  CRSVRTVKQM QVSLTSKHS RKSSSYSSSS TTVKTSY  ctgctctgca cggcacagga gagcaactt ctacagacag accaaggctt ccatttgctg A  ctgacacatg gaactgaggt gaaattgtgc tccatgattt tacagatttc ataactttta  agagacggga ctcaagtgcat caaaatgaaa gccctcatct ttgcagctgc tggcctcctg  cttctgttgc ccacttttgc tcagagtgcc atggaataat atacaacaa cttggcaaaag  ccaaccttac ccattaagac ctttcgtgga gtcctcccaa attcttttga agagtcccc  ttttctgcct tggaaggctg gacaggagcc acgattactg taaaaattaa gtgccctgaa  gaaagtgcct cacatctcca tgtgaaaaat gctacocatg ggtacctgac cagctcctta  agtactaaac tgatacctgc catctacctc ctggtgtttg tagttggtgt cccggccaat  gctgtgaccc tgtggatgct tttcttcagg accagatcca tctgtaccac tgtattctac  accaacctgg ccattgcaga ttttcttttt tgtgttacct tgccttttaa gatagcttat  catctcaatg ggaacaaactg ggtatttggga gaggtcctgt gccggggccac cacagtcac  ttctatggca acatgtactg tccattctg ctccttgctt gcatcagcat caaccgtcac  ctggccatcg tccatccttt caccataccg ggcctgcccc agcacaccta tgccttggtg  acatgtggac tgggtgtggc aacagttttc ttatatatgc tggcattttt catactgaag  caggaatatt atcttgttca gccagacatc accactgccc atgatgttca caacacttgc  gagtcctcat ctcccttcca actctattac ttcattcctt tggcattctt tggattctta  attccatttg tgcctatcat ctactgctat gcagcatcca tccggacact taatgcatac  gatecatagat ggttgtggtg tggttaaggcg agtctcctca tccctgtgat tttaccatt  tgctttgctc caagcaaatat tattcttatt attcaaccatg ctaactacta ctacaacaa  actgatggct tatattttat atatctcata gctttgtgcc tgggtagtct taatagtgtc  ttagatccat tcccttattt tctcatgtca aaaaaccagaa atcactccac tgcctacott  acaaaatagt gaaatgatct tagagaaaca ggacagccat cacagagaac gtctgttttc  aagaaaca taagcatagt gcaaggagct ccatttccga gctcctaaga aatatgcttc  aaaggtcaaa cattacaaaa gcattagtag ttgttttgtt tgtttttgag actgagtctc  actttatcac ccagactggc gtgcagtggc actatcttgg ctcattgcaa cctctgcctc  ccaggtcagc ctcccaagta gctgggatta caccaccatg cccagctact aaaaatactt  gtatttttag tagagacggg gtttcacat gttagaccag ctggtcttga actcctgacc  tcaagtgatc ttccggcctc agcctcccaa agtgcctggat tacaggcgtg agccactgag  ccagccagca ttagtaattt ttaaaaacac ttatcagta ttttaaaaat gttaatgcag  gagaaaagat atcacaaact tatggaaaat gacatttcca tttgccttat tgctacttca  agctctttta atcaccatct tccctatttc </p>	Homo sapiens
Proteinase- Activated Receptor 3	302	4052	Proteinase- Activated Receptor 3	NP_004092.1	<p> MKALIFAAAG LLLLPTFCQ SGMENTNNL AKPTLPIKTF RGAPPNSFEE PFPSALEGWT P  GATITVKIC PEESASHLV KNATMGYITS SLSTKLIPAI YLLVFGVGP ANAVTLWMLF  FTRSICTTV FYTNLAIADE LFCVTLPFKI AYHNGNNWV FGEVLCRATT VIFYGNMYCS  ILLACISIN RYLAIVHPFT YRGLPKHTYA LVTGGLWAT VFYMLPFFI LKQEYLVQV  DITTCDDVHN TCESSPPFQL YYFISLAFFG FLIPFVLIY CYAAIIRTIN AYDHRWLMYV </p>	Homo sapiens

303	4090	G Protein- Coupled Receptor GPR17	NP_005291	KASLLILVIF TICFAPSNI LIIHHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgacaccca cgggcgagaga tcacctggtg cccgcagac cctgtccct tcctcccgga A ccagcagta gaggatgtcc aaacggagt ggtagctgg atccagaaag ccccaagag agatgctgaa actctcagg tctgactcca gcaaaagcat gaatggcctt gaatgggttc ccccaggtct gatcaccaac ttctccctgg ccaaggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctcccttct acctcttga ttttatcctg gctttagt gcaataccct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc ccggccaacg tgttcoctgat gcatctggcc gtggcgact tgctgtcgt gctgggtcctg ccacccgccc tggtctacca cttctctggg aacctgtgg cattgggga aatcgcatg cgtctcacgg gcttccctt ctacctcaac atgtacgcca gcatctact cctcacctgc atcagegccg accgtttcct ggccattgtg caccgggtca agtccctcaa gctccgagc cccctctacg cacacctggc ctgtgccttc ctgtgggtgg tggtggctgt ggccatggcc ccgctgctgg tgagccaca gacctgtcag accaaccaca cgttccctgg cagtggcctt cacttccc ttcatcaca aggctccca coactgcctg gtgtccctg atcatcgca gctgcggca gggcctgct gtggagaagc cggtcacctg ctacctgtg ccatgtgtg ccatgtgtg ggcctgtgt ggcctgtgt gcctcaagac caaggcagt cgcctgtgt cgcctgtgt cgcctgtgt cgcctgtgt tcgtgcccta ccacgtcaac cgtccgtgt acgtgtgtg caaccgcat cactcctgc ctcaccagcc cctggccac ccagcgcat ctggccctg atcatgtatt tcttctgtg tgagaagttc cgccacgccc tcaacggggc actcgacccc atcatgtatt tcttctgtg tgagaagttc cgccacgccc tgtgcaactt gctctgtgg aagggtca agggccgccc cccagcttc gaaggga ccaacgagag ctgctgtgt gcaagtcag agtctgtgag gggggggcgt gtccagccc agcgcagact gtttagact cagcagacc cagcagacc agcagaggc atctgccc tccccagcca cctcccagc aagcaacctg aaatctcagc agatgccac catttctta gatcgctag tctcaaccca taaaaggaa gaactgaca aggggatcca tcggccacc cctgcaggg gcttgtgat gctacaatgg ctctagaca ctcaacgact tcatctgtg cagggaaga ggaggccgga agaacaacc ctgaacaatg gagcccttc tttccgcta ggtcccagc ctccttccc ctacagaatc gctcctggc gaggtcagc agaaagacc tgaaggcagg ctgcaaatga cccagaagag ggacctggga gtcctgtgtg ggacggggag ggagtctaa tactccttg cagcgcaagg tactctgagt cccctctga gtgcctctg cagacacaca ctgctgtagt tgaagagaca caggccacac attcagggt ggtgcccagc ggacgtcagc actcacggcc tgcgggact cagcagact cagcagct ttgacaggct cccagccctc cagtcctg cagcacaag cctgcaacc cagagctct ttgacaggct cccagccctc cagtcctg acaagcatgt gcagtcacgg gagctcagct caggccagg ctgggctgtg cactgcctc ccactgacc agaccactt cctccagaga ggcctctct cgcctgact atttccctg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactgta gctttaagac taaaaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRSWAGS RKPPREMLKL SGDSSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFASFYLLDF ILALVGNLIL LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRIVYHF SGNHWPFG EI ACRLTGFLFY LNMVASYFL TCISADRFIA IVHPVKSILKL RRPLYAHLAC AFLWVVVAVA MAPLLVSPQT VQTNHTVVCL QLYREKASHH ALVSLAVFT FPFITVTCTY	ccgacaccca cgggcgagaga tcacctggtg cccgcagac cctgtccct tcctcccgga A ccagcagta gaggatgtcc aaacggagt ggtagctgg atccagaaag ccccaagag agatgctgaa actctcagg tctgactcca gcaaaagcat gaatggcctt gaatgggttc ccccaggtct gatcaccaac ttctccctgg ccaaggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctcccttct acctcttga ttttatcctg gctttagt gcaataccct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc ccggccaacg tgttcoctgat gcatctggcc gtggcgact tgctgtcgt gctgggtcctg ccacccgccc tggtctacca cttctctggg aacctgtgg cattgggga aatcgcatg cgtctcacgg gcttccctt ctacctcaac atgtacgcca gcatctact cctcacctgc atcagegccg accgtttcct ggccattgtg caccgggtca agtccctcaa gctccgagc cccctctacg cacacctggc ctgtgccttc ctgtgggtgg tggtggctgt ggccatggcc ccgctgctgg tgagccaca gacctgtcag accaaccaca cgttccctgg cagtggcctt cacttccc ttcatcaca aggctccca coactgcctg gtgtccctg atcatcgca gctgcggca gggcctgct gtggagaagc cggtcacctg ctacctgtg ccatgtgtg ccatgtgtg ggcctgtgt ggcctgtgt gcctcaagac caaggcagt cgcctgtgt cgcctgtgt cgcctgtgt cgcctgtgt tcgtgcccta ccacgtcaac cgtccgtgt acgtgtgtg caaccgcat cactcctgc ctcaccagcc cctggccac ccagcgcat ctggccctg atcatgtatt tcttctgtg tgagaagttc cgccacgccc tcaacggggc actcgacccc atcatgtatt tcttctgtg tgagaagttc cgccacgccc tgtgcaactt gctctgtgg aagggtca agggccgccc cccagcttc gaaggga ccaacgagag ctgctgtgt gcaagtcag agtctgtgag gggggggcgt gtccagccc agcgcagact gtttagact cagcagacc cagcagacc agcagaggc atctgccc tccccagcca cctcccagc aagcaacctg aaatctcagc agatgccac catttctta gatcgctag tctcaaccca taaaaggaa gaactgaca aggggatcca tcggccacc cctgcaggg gcttgtgat gctacaatgg ctctagaca ctcaacgact tcatctgtg cagggaaga ggaggccgga agaacaacc ctgaacaatg gagcccttc tttccgcta ggtcccagc ctccttccc ctacagaatc gctcctggc gaggtcagc agaaagacc tgaaggcagg ctgcaaatga cccagaagag ggacctggga gtcctgtgtg ggacggggag ggagtctaa tactccttg cagcgcaagg tactctgagt cccctctga gtgcctctg cagacacaca ctgctgtagt tgaagagaca caggccacac attcagggt ggtgcccagc ggacgtcagc actcacggcc tgcgggact cagcagact cagcagct ttgacaggct cccagccctc cagtcctg cagcacaag cctgcaacc cagagctct ttgacaggct cccagccctc cagtcctg acaagcatgt gcagtcacgg gagctcagct caggccagg ctgggctgtg cactgcctc ccactgacc agaccactt cctccagaga ggcctctct cgcctgact atttccctg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactgta gctttaagac taaaaaaa	Homo sapiens

305	4254	Rhodopsin	NM_000539	LSAKSEL	IIIRSLRQG LRVEKRLTK AVPMIAIVLA IFLVCFVPHY VNRSVVVLHY RSHGASCATQ RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGPPP SFEGKTNES	A	Homo sapiens
					agagtcatacc agctggagcc ctgagtggct gagctcaggc cttegcaagca ttcttgggtg	ttcttgggtg	
					ggagcagcca cgggtcagcc acaaggcca cagccatgaa tggcacagaa ggcctaact	ggcctaact	
					tctacgtgcc ttctccaat cgcacgggtg tggtagcag cccctcgag taccacagt	ccccacagt	
					actacctggc tgagccatgg cagttctcca tggtagccgc ctacatgttt ctgctgacg	ctgctgacg	
					tgctgggctt ccccatcaac ttcttcacgc tctactcac cgtccagcac aagaagctgc	aagaagctgc	
					gcacgcctct caactacatc ctgctcaacc tagccgtggc tgacctcttc atggtcctag	atggtcctag	
					gtggcttcac cagcaccctc tacacctctc tgcattgata ctctgtcttc gggccacag	gggcccacag	
					gatgcaattt ggagggttc ttggccacc ttggcgttga aattgcctg tggtccttg	tggtccttg	
					tggtcctggc catcagcgg tacgtggtgg tgtgtaagcc catgagcaac ttccgcttcg	ttccgcttcg	
					gggagaaacca tgccatcatg ggcgttgct tcaactgggt catggcgtg gctgcgcgc	gctgcgcgc	
					caccccaact cgcgggtgg tccaggtaca tcccagagg cctgcagtc tegtgtgaa	tegtgtgaa	
					tcgactacta cactgtcaag cgggaggtca acaacgagtc tttgtcatc tacatgttcg	tacatgttcg	
					tggtccactt caccatcccc atgattatca tctttttctg ctatgggcag ctctcttca	ctctcttca	
					ccgtcaaggga ggcggtgcc cagcagcagg agtcagcaac cacacagaag gcagagaag	gcagagaag	
					aggtcacccg catggtcatc atcatgttca tctgttctct gatctgctgg gtgccctacg	gtgccctacg	
					ccagcgtggc attctacatc ttacaccacc agggctccaa ctccggtccc atcttcatga	atcttcatga	
					ccatcccagc gttctttgcc aagagcgccg ccatctacaa cctgtcatc tatatcatga	tatatcatga	
					tgaacaaggca gtccgggaa tgcatgttca ccaccatctg ctggcggaag aaccacatgg	aaccacatgg	
					gtacgatga ggcctctgct accgtgtcca agacggagag gagccaggtg gccccggcct	gccccggcct	
					aagacctgcc taggactctg tggccgacta taggcgtctc ccatccccta caccttccc	caccttccc	
					cagccacagc catcccacca ggagcagcgc ctgtgcagaa tgaacgaagt cacataggct	cacataggct	
					ccttaatttt tttttttttt ttaagaaata attaatgagg ctctcactc acctgggaca	acctgggaca	
					gcctgagaag ggacatccac caagacctac tgatctggag tcccacgttc cccaaaggcca	cccaaaggcca	
					gcgggatgtg tgccctcct cctcccaact catcttccag gaacacgagg attcttgctt	attcttgctt	
					tctggaaaag tgtccagct tagggataag tgtctagcac agaattgggc acacagtagg	acacagtagg	
					tgcttaataa atgctggatg gatgcaggaa ggaatggagg aatgaatggg aaggagaaac	aaggagaaac	
					atatctatcc tctcagaccc tcgcagcagc agcaactcat actgggctaa tgatatggag	tgatatggag	
					cagttgtttt tccctccctg ggctcactt tcttctcta taaatggaa atcccagatc	atcccagatc	
					cctggtcctg cgcacacgca gctactgaga agacaaaaag aggtgtgtgt gtgtctatgt	gtgtctatgt	
					gtgtgtttca gcaatttcta aatagcaaga agctgtacag attctagtta atgttgtgaa	atgttgtgaa	
					taacatcaat taatgtaact agttaattac tatgattatc acctctgat agtgaacatt	agtgaacatt	
					ttgagattgg gcattcagat gatggggttt caccacaact tggggcagggt ttttaaaat	ttttaaaat	
					tagctaggca tcaaggccag accagggtg ggggttgggc tgtaggcagg gacagtcaac	gacagtcaac	
					ggaatgcagg atgcagtcac cagacctgaa aaaacacac tgggggaggg ggacggtgaa	ggacggtgaa	
					ggccaagtcc ccaatgaggg tgagattggg cctggggctc caccctagt gtggggcccc	gtggggcccc	
					aggtcccggt cctccccttc ccaatgtggc ctatgtagag agagcccttt ctctcagcct	ctctcagcct	
					ctgggaagcca cctgtctttt tgctctagca cctgggtccc agcatctaga gcattggagcc	gcattggagcc	
					tctagaagcc atgtcaccc gccacattt aattaacagg tgaagtcctg atgtcatcct	atgtcatcct	

306	4254	Rhodopsin	NP_000530.1	MNGTEGNEFY VPFNSATGVV RSPFEYPQYV LAEPWFQFSL AAYMFLILVL GPFINFLTLY P VTVQHKKLRT PLNYILLNLA VADLFMLVGG FTSTLYTSLH GYFVFGPTGC NLEGGFATLG GEIALWSILV LAIERVAVVC KPMNSFRFGE NHAIMGVAFT WMALACAAP PLAGWSRYIP EGLQCSQID YYTLKPEVNN ESFVIYMFVV HFTIPMLIIF FCYGLVFTV KEAAAQQQES ATTQKAEKEV TRWIIIMVIA FLICWVPYAS VAFYIFTHQG SNFGPIFMTI PAFFAKSAAI YNPVIYIMMN KQFRNCMLTT ICCGNPLGD DEASATVSKT ETSQVAPA	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	tactcgaaga gcttagaaac aaagagtggg aaattccact gggcctacct tcttggggg tgttcatggg ccccgatttc cagtttccct tgccagacaa gccatcttc agcagttgct agtccattct ccattctgga gaattctgctc caaaaagctg gccatcttc tgagggtgca gaattaagct gctcagtaa ctgctccccc ttctccatat aagcaaaagcc agaagctcta gctttaccca gctctgctg gagactaagg caaattgggc cattaaaagc tcagctccta tgttggtatt aacggtggg ggtttgtgtg ctttccact ctatccacag gatagattga aactgccagc ttccacctga tccctgacct tgggtggctt ggttagagca atgagcagag ccaagcagca cagagtcccc tgggggctaga ggtggaggag gcagtctctg gaatgggaaa aacccca	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	agagacagct gggccactgg cagtgaggga gagtggagat ggcagagacc agtgccctgc A ccactggctt cggggagctg gagggtgctg cgtgggggat ggtgctactg gtggaagctc tctccggctc cagctcaat accctgacca tcttctctt ctgcaagacc ccggagctgc ggactccctg ccactactg gtgctgagct tggctcttgc ggcactggg atcagcctga atgccctcgt tgcagccaca tccagccttc tccggcgtctg gccctacgc tcggacggct gccaggctca cggcttccag ggctttgtga cagcgttggc cagcatctgc agcagtgcaag ccatcgcatg ggggcgttat caccactact gcaccgtag ccagctggcc tggaaactcag ccgtctctct ggtgctcttc gttggtgctgt cttctgcctt ctggggcagct ctgcccttc tgggttgggg tcaatatgac tatgagccac tggggacatg ctgcaccctg gactactcca agggggacag aaacttcacc agcttctctt tcaccatgtc cttcttcaac ttcgccatgc ccctcttcat cagcatcact tctacagtc tcatggagca gaaactgggg aagagtggcc atctccaggt aaacaccact ctgccagcaa ggaagctgct gctcggctgg ggcctctatg ccatctctga tctatacgca gtcactcgag acgtgacttc catctcccc aaactgcaga tgggtccccg cctcattgcc aaaatgtgc ccagatcaa tgccatcaac tatgcccctgg gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaagg accgaaccaa gtgagcctgc caccctggag tgagcccccag gccaggaggc tgttccagga gtcctgcccc gcagcctcgg tggccaaagcc cagacactca cccaccttc ccagtggccc cgtggatcct ggtcctaggg tggacacagg attcagaaag acaccaggct gcacagaaag agccagatgg acctgagtg cggtcacagc cccctacact caaggctgag aggcctcagg aaagtcattc ctttttaaaa ataataataa atgtaagggg gtacagtga gttttgttac atggatagat tgccttagtg tgaagtctgg gcttttagtg taaccatcac cctaataata tacgttgtac ccattaaagt atttctcatc ccttcccccc toccaccttg tcaccttct gagtcctcaa tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc acttacaagt gagaacatgt ggtatttgac ttcca	Homo sapiens

309	4321	Coupled Receptor RPE	Secretin Receptor	NM_002980	<p>SQLAWN SAVS LVLFWLSSA FWAALPLLGW GHYDYEP LGT CCTLDYSKGD RNFTSFLFTM  SFENFAMPLF ITITSYSIME QKLGKSGHLQ VNTTLPARTL LLGWGPYAIL YLYAVIADVT  SISPKIQMVP ALIAKMVPTI NAINYALGNE MVCRGIWQCL SPQKREKDR T K  acgagggcgg cggagcccg ggaccctgg cggggcgctg agtccccgag cgggcagagg A  gcacgggacg cggagcgtcg gggcgccctc ggggaacgtg cgggcacat gcgtcccccac  ctgtcgccgc cgttcagca gctactactg cgttcgtcg cgttcgtcg cgcgcactcg  actggagccc tccccgact atgtgacgtg ctacagctg tgtgggaaga gcaagaccag  tgctgcagg aactctccag agagcagaca ggagacctgg gcacggagca gccagtgcc  ggttgtagg ggtgtggga aatgcccag attcctcgg atgtcacca ggagaaatgg ttcctgttc  gtggaggtgg aatgcccag atgtcctcg ctggtcagaa accctcccca ggctaatct ggctgtggc  cgaaactgca cacaggatgg acgactcttc caacgagaag cggcactcct acctgctgaa gctgaaagt  gttaatgtga aggactcttc caacgagaag cgtcctcctg gtcactcctc tggcgccct tggcactcct  atgtacacgg tgggctacag ctccctcctg gtcactcctc tggcgccct acctgctgaa gctgaaagt  tgtgttttc ggaggctcca ctgcactcgc caacttcac aaggagcgg tgcctcttc ctcagatgat  ttcatccttc gtgcctcgtc caacttcac aaggagcgg tgcactcctc tgcctcttc ctcagatgat  tgcactact ggcactcgc caacttcac aaggagcgg tgcactcctc tgcctcttc ctcagatgat  tgcatcatgg ccaactact ctggtcgtg gtggaaggcc totacttca cacactcctc  gccatcctct tcttctctga aagaaagtac ctccaggag ttgtggcatt cggatggggg  tctccagcca tttttgttc tttgtggct attgccagac actttctgga agatgttggg  tgctgggaca tcaatgcca cgcactcctc tgggtgatca ttcgtgttc tgtgatcctc  tccatcctga ttaatttcat ccttttcaata aacattctaa gaactcgtat gagaaactt  agaacccaag aaacaagagg aaatgaagtc agcattata agcgcctggc caggtcact  ctcctgctga tccccctct tggcactcac tacatcgtct cgccttctc cccagaggac  gctatggaga tccagctgtt ttttgaacta gcccttggct cattccagg actggtgtg  gccgtcctct actgcttct caatggggag gtgcagctgg aggttcagaa gaagtggcag  caatggcacc tccgtgagtt cccactgca cccgtggcct ccttcagca cagaccaag  gccagccact tggagcagag ccaggccacc tgcaggacca gcatcatctg agaggtgga  gcagggtcac ccacggacag agaccaag aggtcctcg aggtcggc actgctgtg  gacagccagt ctcccagca gacacctgt gtcctcctc agctgaagat gcccctccc  aggccttga ctctccgaa gggatgtgag gactgtgg gcaggacaa ggcctggat  ttggttcgtt tgctctctg ggaagagaag ttcagggggtc ccagaaagg acagggaat  aaatgggtgc tgggatgaga ttc</p>	Homo sapiens
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	<p>MRPHLSPPLQ QLLLPVLLAC AAHSTGALPR LCDVLQVLWE EQDQCLQELS REQTDIGTE P  QVPGCEGMW DNISCPSSV PGRMVEVECP RFLRLMTRN GSLFRNCTQD GWSETFPRN  LACGVNDS SNEKRHSYLL KLKVMYTVGY SSSLVMLLVA LGILCAFRRL HCTRNYTHMH  LFVSEILRAL SNFKDAVLF SSDDVTYCDP HRACKLVMV LFQYICIMANY SWLLVEGLYL  HTLLAISFFS ERKYLGFA FWGSPAIFV ALMAIAHRFL EDVGCWDINA NASIWWIIRG  PVILSILINF ILFINILRIL MRKLFTQETR GNEVSHYKRL ARSTLLIPL FGIHYIVFAP  SPEDAMEIQL FFELALGSFQ GLVAVLYCF LNCVQLEVQ KKWQQWHLRE FPLHPVASFS  NSTKASHLEQ SQGTCRTSII</p>	Homo sapiens

311	4480	Somatostatin NM_001049 Receptor Type 1	atgtttcccca atggcaccgc ctctctctct ctctctctct tctctctctc ctgacccacg cccgggcagc A tgccggcgaag gcggcgccag caggggcccc ggggcccgcg ctgcggacgg catggaggag ccaggggcga atgcgtccca gaacgggacc ttgagcgagg gccagggcag cgcctccctg atctctttca tctactccgt ggtgtgcctg gtggggctgt gtgggaactc tatggtcctc tacgtgatcc tgcgtatgc caagatgaag acggcaccac acatctacat cctaaatctg gccattgtcg atgagctgct catgctcagc gtgcccctcc tagtcaactc cacgttgttg cgccactggc ccttcggctg cctgctctgc ctcagctgtg cgcgtgtgga gcgggtcaac atgttcacca gcattactg tctgactgtg ctcagcgtgg accgtactgt ggcctgtgtg catcccatca agggggcccg ctaccggcgg ccacacgtgg ccaaggtagt aaacctggc gtgtgggtgc tatcgtgct cgtcactcgt cccatcgtgg tctctctcg caccgggccc aacagcgacg gcagggtggc ttgcaacatg ctcatgccag agcccgtca acgtggctg gtgggcttcg tgtgttacac atttctcatg ggttctcgc tgcctgtgg ggctatctgc ctgtgctacg tgetcatcat tgctaagatg cgcattgtgg cctcaaggc cggctggcag cagcgaagc gctcggagcg caagatcacc ttaatggtga tgatggtggt gatggtgttt gtcattcgtt ggtgctctt ctacgtggtg cagctggtta acgtgttgc tgagcaggac gacgcacagg tgagtcagct gtcggtcctc ctgcgtatg ccaacagctg cgccaaaccc atcctctatg gcttctctc agacaactc aagcgtctt tccaacgcat cctatgcctc agctggatgg acaacggcgc ggaggagcgg gttgactatt acgcccacgc gctcaagagc cgtgcctaca gtgtggaaga cttccaacct gagaacctgg agtcggcgcg cgtcttccgt aatggacct gcaactccc gatacagcg ctctga ISFIYVWVCL VGLCGNSMVI YVILRYAKMK TATNIYLNL AJADELLMLS VPFLVTSTLL P RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDYVAVV HPIKAARYRR PTVAKVNLG VWVLSLVL PIVFSTRTA NSDGTACNM LMPEAQRWL VGFVLYTFLM GFLLPVGAIC LCYVLIARM RMVALKAGWQ QRKRSEKIT LMVMVMVVF VICWMPFYV QLVNVAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSEKILCL SWMDNAAEEP VDYATALKS RAYSVEDFQP ENLESGGVER NGTCTSRITT L	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtgtgtgc aaccaacacc tcaaacaccaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat tttgtggtct gcatcattgg gttgtgtggc aacacacttg tcaattatgt cctcctcgc tatgccaaga tgaagacct caccacatt tacatcctca acctggccat cgcagatgag ctcttcatgc tgggtctgccc tttcttggt atgcagggtgg ctctgttcca ctggcccttt ggcaaggcca tttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc tcttgccctga cagtcatgag catcgaccga tacctggctg tgggtccacc catcaagtgc gccaagtga ggagacccc gacggccaag atgatcacca tggctgtgtg gggagtctct ctgctgtgta tcttgcccat catgatata gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctggggctt ggtacacagg gttcatcctc tacactttca tcttggggtt cctggtaacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc cctggaatc cgagtgggct cctctaagag gaagaagtct gagaagaagg tcacccgaat ggtgtccatc gtgggtggctg tcttcatctt ctgctggctt ccttctaca tattcaacgt tcttccgtc	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2		Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcaagccccc cccagccctt aaagccatgt ttgactttgt ggtggtcctc acctatgcta acagctgtgc caacctatc ctatatgctt tcttgtctga caacttcaag aagagcttcc agaattgctt ctgcttggtc aagtgtagcg gcacagatga tgggagcgcg agtgcacgta agcaggacaa atcccggtg aatgagacca cggagaccca gaggacctc ctcaatggag acctccaac cagtatctga MDMADEPLNG SHTWLSTIPD LNSVSTNT SNQTEPYDL TSNAVLTFFI FVCIIGLGG P NTLVIYVILR YAKMKTIINI YILNLAIAD LFMGLPFLA MQVALVHPF GKAI CRVMT VDGINQFTSI FCLTVMSIDR YLAVVHPKS AKRRPRTAK MITMAVWGS LVLILPIMY AGLRSNOWGR SSCTINWPG SGAWYTGFI YTFILGLVP LTIICLCYLF IIKVKSSGI RVGSSKRKKS EKKVTRMVS I VVAVFICWL PFYFNVSS SMAISPTPAL KGMDFVVVL TYANSCANPI LYAFSLDNFK KSFQNVLCV KVSQTDDGER SDSKQDKSRL NETTERQTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcatccatc atcgggtgtcc acgacctcag aacctgagaa tgcctcctcg A gacctggcccc cagatgccac cctgggcaac gtgtcggcgg gcccaagccc ggcagggtcg gcgtcagtg gcgttctgat cccctggtc tactgtgtg tgtgctggtt ggcctgtctg ggtaaactgc tggtaactcta tgtgttcttg cggcacacgg ccagccctc agtaccacac gtctacatcc tcaacctggc gtggtggcag gactcttcca tgtgtgggtt gccttctctg gcgccccaga acgacctgct ctactggccc ttcggtccc tcatgtgcg cctgtctatg gcgtgtgat gcatcaacca gtaccacgc atattctgc tgaatgtcat gagcgtggag cgctacctgg ccgtgtgata tcccaccgc tggcccgct ggcgcacagc tccgtgtgccc cgacaggtea gcgcgggtgt gtgggtggcc tcagccgttg tgggtctgct cgtgtgtggtc ttctcgggag tgccccggg catgagcacc tgccacatgc agtggccga gccggcgcg gcctggcgag ccggttctcat catctacacg gcgcactgg gcttctctcg gccgtctgtg gtcatctgct tctgtacct gctcctctg gtgaaggtgc gctcagctgg gcgcgggtg tggccacct cgtgccagcg gcgcggcgc tccgaacga ggttcacgcg catggtgtg gcgtgtgtg cgtcttctgt gctctgttg atgcccttct acgtgtctaa catcgtcaac gtggtgtgccc cactgccga ggagctgccc ttctttgggc tctacttctt ggtgtgtggg ctgccctatg ccaacagctg tgccaacccc atcttcttat gcttctctc ctacgcttc aagcagggt tccgcagggt cctgctgccc cctccccgc gtgtgcccag ccaggagccc actgtgggccc ccccgagaa gactgaggag gaggatgagg aggagagga tgggagagg agcaggagg ggggcaagg gaggagatg aacggccggg tcagccagat cagcagcct ggcaccagcg ggcaggagcg gccgccagc agagtggcca gcaaggagca gcagctcta ccccaaagg cttccactgg ggagaagtc agcacatgc gcatcagta cctgtag MDMLHPSSVS TTSEPNASS AWPDPATLGN VSAGPSAGL AVSGLIPLV YLVCVVGLL P GNSLVIYVVL RHTASPSVTN VYILNLALAD ELFMGLPFL AQNALSYWP FGSMLRLVM AVDGINQFTS IFTLTVMSVD RYLAVVHPTR SARWTAIPA RVTSAAVWA SVVSLPVV FSGVPRGMST CHMQWPEPAA AWRAGFIYT AALGFFGPLL VICLCYLLIV KAVRSARRV WAPSCQRRR SERRVTRMVV AVVALFVLCW MPFVVLNIVN VVCPLPEEPA FFGLYFLVVA LYANSCANP ILYGFLSYRF KQFRFVLLR PSRRVRSQEP TVGPPEKTEE EDEEEDGEE SREGGKGKEM NGRVSOITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMRI SYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgct gccccccggg ggcgaggaag ggcctggggac ggcctggccc A tctgcagcca atgcagtag cgtcccgcg ggcgaggg agcggtggc gggcccggg gacgcgggg cggcgggcat ggtcgctatc cagtcatct acgcgctggt gtgcctggtg ggctggtgg gcaacgcct ggtcatcttc gtgacccac gatgaagacg gtacaccca tctacctgt caacctggcc gtgacgacg agctcttcat gctgagcgtg cccttcgtg cctcgtcggc cgcctcgcg cactggccct tgggtccgt gctgtgcgc gcggtgctca gcgtcgacg cctcaacatg ttcaccatg tcttctgtc caccgtgctc agcgtggacc gctacgtggc cgtggtgac cctctgcgc cggcgacctt cactctccc agcgtggcca agctcatcaa cctggcgctg tggctggcat cctgttggc cactctccc atgcctatc togcagacac cagaccgct cggcgggcc agccgtggc ctgcaacctg cagtggccac acccgccgtg gtcggcagtc ttcgtggtc acacttctc gctgggttc ctgctgccc gctgggcat tggcctgtg tactgtca tctgggcaa gatgcgccc gtggccctgc ggcctggctg gcagcagcg agcgctcgg agaagaaat caccagcgtg gtcgtgatg tctgtgctc cttgtgtct tctgtgatg ctttctact ggtcagctg ctgaacctc tctgacacg cctgatgcc accgtcaacc agtgtccct tatcctcagc tatgcaaca gctgcgcaa cctattctc tatgcttc tctcgacaa ctcccgcca tccctccagc ggttctctg cctgctgctg tgcctctgc aggtgctg aggtgctgag gaggagccc tggactacta tgcactgct ctaagagca aggtggggc aggtgcatg tgccccccac taaatgcca gcaggaagcc aaccggccc caagcgtc ccctcacca ggaccacc cttctga MSAPSTLPPG GEEGLGTWP SAANASAPA EAERAVAGPG DARAAGMVAI QCIYALVCIV P GLVGNALVIF VILRYAKMT ATTIIYLLNL VADELFMLSV PFVASSAALR HWPFGSVLCR AVLSVDGLNM FTSVECLTVL SVDRYVAVVH PLRAATYRR SVAKLINLGW WLASLLVTLPL IAIFADTRPA RGGQAVACNL QWPHPAWSAV FVYTFLLGF LLPVLAIGLC YLLIVGKMR VALRAGWQQR RSEKKITRL VLMVVVFL CMWPFYVQL LNLVWTSIDA TNHVSILIS YANSCANPIL YGFLSDNFRF SFQRVLCRL CLLEGAGGAE EEPLDYATA LKSKGAGCM CPPLKQOEALQPEPGRKRI PLTRTTF	Homo sapiens
318	4483	Somatostatin NP_001043.1 Receptor Type 4	atggagcccc tgttcccagc ctccagccc agctggaacg cctctcccc gggggtgccc A tctggagggc gtgacaaacg gacgtggtg ggcggcgcg cctcggeag ggcggggcg gtgctggtgc cctgctgta cctgctggtg tgtgcggcg gctggggcg gaacacgctg gtcatctacg tggctgctg cctcgcaag atgaagaccg tcaccaacat ctacattctc aacctggcag tggcgacgt cctgtacatg ctggggctgc cttctctggc cagcagaac gcgcgtctc tctggccctt cggcccgctc ctgtgcgcg tggctatgac gctggacggc gtcaaccagt tcaccagtgt cttctgctg acagtcata gcgtggaccg ctacctggca gtggtgccc cgtgagctc ggcggctg cgtcgccgc tcctgggtgt cgcggacgtg gcgcggcct ggttctgtc tctgtcatg tgcgtgcgc tcctgggtgt cgcggacgtg caggagggcg gtacctgcaa cgcagctg cggagcccc tgggctgtg ggcggcgtc ttcatcatc acacggcgt gctgggttc ttcgcgcgc tgcgtgcat ctgctgtgc tacctgctca tctgtgtgaa ggtgagggcg gcggcgctg gcgtgggctg cgtcgggcg cgctcgagc ggaaggtgac ggcactggtg tgggtggtg tgcgtggtt tgcgggatg tggctgccc tcttaccgt caacatcgtc aacctggcg tggcgctgcc ccaggagccc	Homo sapiens
319	4484	Somatostatin NM_001053 Receptor Type 5		Homo sapiens



320	4484	Somatostatin NP_001044.1 Receptor Type 5	gacctcgccg gacctactt cttcgtggtc atcctctct acgccaacag ctgtgccaac cccgtctctt acggtctctt cttcgacaac ttcgcgaga gttccagaa ggttctgtgc ctccgcaagg gctctggtgc caaggacgtt gacgcaagg agccggtcc agacaggatc cggcagcagc aggaggccac gccgcccgcg caccgcccgc cagccaacgg gcttatgcag accagcaagc tgtga	Homo sapiens
			MEPLFPASTP SWNASSPGAA SGGGDNRTL VPAPSAGARA VLVPVLYLLV CAAGLGGNTL P VIYVLRFAK MKTNTNIYIL NLAVADVLYM IGLPFLATON AASFWPFGPV LCRLVMTLDG VNQFTSVFCL TVMSVDRYLA VVHPLSSARW RRPVAKIAS AAHWLSLCM SLPLLVFADV QEGGTNASW PEPVGLMGAV FIYTAVLGF EAPLVICLC YLLIVVKVRA AGVRVGCVR RSEKVTMNV LVVVLVFGC WLPFTVNIV NLAVLPQEP ASAGLYFFV ILSYANSCAN PVLVGLSDN FRQSFQKVL LKRGSGAKDA DATEPRPDRI RQOEATPPA HRAAANGLMQ TSKL	
321	4552	Tachykinin Receptor 1	aatccagagc caccgcgggc aggcgggcag tgcattccaga agcgtttata ttctgagcgc A cagttcagct ttcaaaaaga gtgctgccc taaaagcct tccaccctc tgtctgcttt agaaggacc tgagcccccag gcgcagccca caggactctg ctgcagagg ggttctgtga cagatagtag gctttacgcc tagcttgaa atggataacg tccctccggt gactcagac ctctcccaa acatctccac taacacctg gacccaatc agttcgtgca accagcctgg caaattgtcc ttggggcagc tgcctaacg gcaattggtg tgacctctgt ggtgggcaac gtggtagtga tgtggatcat cttagccac aaagaatga ggacagtgc gaactatatt ctggtgaacc tggccttcgc ggaggcctcc atggtgcat tcaatacagt ggtgaacttc acctatgctg tccacaaga atggtactac ggctgttct actgcaagt ccacaacttc tttccatcg ccgtgtctt cgcagctatc tactccatga cggctgtggc ctttgatagg tacctggcca tcatacatc cctccagccc cggctgtcag ccacagccc caaagtgtc atctgtgtca tctgggtcct ggtctctctg ctggccttc cccagggtc ctactcaacc acagagacca tgcccagcag agtcgtgctg atgctgcat ggccagagca tccgaacaag atctatgaga aagtgtacca catctgtgtg actgtgctga tctacttct cccctgctg gtgattggct atgcatacac cgtagtggga atcacactat gggccagtga gatccccggg gactcctctg accgtacca cagagaaagt tctgccaagc gcaaggtggt caaatgatg attgtcgtgg tgtgcacctt cgcctatcgc tggctgccc tccacatctt cttcctctg ccctacatca accagatct ctacctgaag aagtttatcc agcaggtcta cctggccatc atgtggctgg ccatgagctc caccatgtac aaccatca tctactgctg cctcaatgac aggttccgtc tgggttcaa gcatgcttc cgggtgctgc cttcctcag cgcggggac tatgaggggc tggaaatgaa atccaccgg tatctccaga cccagggcag tgtgtacaa gtcagccgcc tggagaccac catctccaca gtggtggggg cccacagaga ggagccagag gacggcccca agggcacacc ctgctcctg gactgacct ccaactgctc ttcacgaagt gactccaaga ccatgacaga gacttcagc ttctctcca atgtgctc ctaggccaca ggcctttgg caggtgcagc cccactgccc ttgactgc cctcctcat gcatggaaat tcccttcac tggaaaccatc agaaacacc tccactggg acttgcaaaa aggtcagta tgggttaggg aaacattcc atcttgagt caaaaaatc caattctcc ctatcttgc cacctcatg ctgtgtgact caaaccaat cactgaact ttgtgagcct gtaataaaa aggtcggacc agctttct caagagcca atgcattcca ttctgggaag tgactttggc	Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgag tgctcattc aggatg	QIVLWAAAYT VIVVTSVGN VVVMWIIIAH P	Homo sapiens
				MDNVLPVDS LSPNISTNTS EPNQFQPAW	QIVLWAAAYT VIVVTSVGN VVVMWIIIAH P	
				KRMRTVTNYF LVNLAFAEAS MAAFTVVNF	TYAVHNEWY GLFYCKFHFNF FPIAAVFASI	
				YSMTAVAFDR YMAIIHPLQP RLSATATKV	ICVIWLALL LAFFQGYST TETMPSRVVC	
				MIWEHPNK IYKVIHICV TVLIYFLPL	VIGYAYTWG ITLWASEIPG DSSDRYHEQV	
				SAKRKVVNM IVVCTFAIC WLPFHIFLL	PYINPDLYLK KFIQQVYLAI MWLAMSSTMY	
				NP1IYCCLND RFLGFKHAF RCCPFISAGD	YEGLEMKSTR YLQTQGSVYK VSRLETTIST	
				VGAHEEPE DGPATPSSL DLTSNCSRS	DSKWTESFS FSSNLS	
323	4687	Thrombin Receptor	NM_001992	ggcgggggc gcacagagc agagggcctt	gcgagggcg gctgaggag cgcggggagg A	Homo sapiens
				ggcgccgag cggctccagc gcagagactc	tactgcacg ccgagggccc ctctcctcgt	
				ccgcgcgcg gacgcgcgc ccagtcgcg	ccccgcgcg ctaaccgcgc cagacacagc	
				gctgcgcgag ggtgccttg accctgatct	taccgtggg caccctgcgc tctgcctgcc	
				gcgaagaccg gctccccgac ccgcagaagt	caggagagag ggtgaagcgg agcagccga	
				ggcggggcag cctccccgag cagcgcgcg	cagagcccg gacaaatgggg ccgcggcggc	
				tgctgctggt ggccgcctgc ttcagtcgtg	gcggcccgct gttgtctgcc cgcacccggg	
				ccgcagggc agaataaaa gcaacaaatg	ccacctaga tccccgtca ttctctctca	
				ggaaccccaa tgataaatat gaacattttt	gggaggatga ggagaaaaat gaaagtgggt	
				taactgaata cagattagtc tccatcaata	aagcagtcg tctcaaaaa caacttcctg	
				cattcatctc agaagatgcc tccggatat	tgaccagctc ctggctgaca ctctttgtcc	
				catctgtgta caccggagtg ttgtagtca	gcctcccatc aaacatcatg gccatcgttg	
				tgctcatcct gaaaatgaag gtcaagaagc	cggcggtggt gtacatgctg caccctggcca	
				cgcagatgt gctgtttgtg tctgtgtcc	ctttaagat cagctattac ttctccggca	
				gtgattggca gtttgggtct gaattgtgtc	gctcgtcac tgcagcattt tactgtaaca	
				tgtaacgctc tatcttgctc atgacagtca	taagcattga ccggtttctg gctgtggtgt	
				atccatgca gtccctctcc tggcgtactc	tgggaaggcg ttccttcact tgtctggcca	
				tctgggcttt ggccatcgca ggggtagtgc	ctctcgtcct caaggagcaa accatccagg	
				tgcccggtct caacatcact acctgtcatg	atgtgctcaa tgaacccctg ctcgagggt	
				actatgccta ctacttctca gcttctctg	tgctctctt ttttgtgccc ctgactcattt	
				ccacggtctg ttatgtgtct atcattcgat	gtcttagctc ttccgcagtt gccaacgcga	
				gcaagaagtc ccgggctttg ttccgttcag	ctgctgtttt ctgcatcttc atcatttgt	
				tccgacccac aaacgtcctc ctgattgcgc	attactcatt cctttctcac acttccacca	
				cagaggctgc ctactttgcc tactctctct	gtgtctgtgt cagcagcata agctcgtgca	
				tccgacccct aatttactat taogtttctt	ctgagtgcga gaggtacgtc tacagtatct	
				tatgctgcaa agaaagtcc gatccagca	gttataacag cagtgggcag ttgatggcaa	
				gtaaaatgga tacctgctct agtaacctga	ataacagcat atacaaaaag ctgttaactt	
				aggaagaggg actgctggga ggttaaaaa	aaaagtatat aaagtgaat aacctgagga	
				ttctattagt cccaccccaa actttattga	ttcacctcct aaacacacag atgtacgact	
				tgcatacctg ctttttatgg gagtgtcaa	gcatgtattt ttgtcaatta ccaaaagat	
				aacaggacga gatgacggtg ttattccaa	ggaatattgc caatgctaca gtaataaatg	
				aatgtcactt ctggatatag ctaggtgaca	tatacatact tacatgtgtg tatatgtaga	

324	4687	Thrombin Receptor	NP_001983.1	<p>tgtatgcaca cacatatatt atttgcagtg cagtatagaa taggcacttt aaacactctt  tccccgcac ccagcaatt atgaaaataa tctctgattc cctgatttaa tatgcaaatg  ctaggttggt agagtttagc cctgaacatt tcatggtgtt catacaagc gagagactcc  atagtttggg cttgtaccac ttttgcaaat agtgtatttt tgaatttggg tgacgggcaag  gtttaagtta ttaagaggta agacttagta ctatctgtgc gtagaagtgc tagtgttttc  aattttaaac atatccaagt ttgaattcct aaaattatgg aaacagatga aaagcctctg  ttttgatatg ggtagtattt ttacatttt acacatgta cacataagcc aaactgagc  ataagtcctc tagtgaatgt aggtggttt cagagttagg ctattcctga gagctgcatg  tgtccgcccc cgatggagga ctccaggcag cagacacatg ccagggccat gtcagacaca  gattggccag aaaccttctc gctgagcctc acagcagtga gactggggcc actacatttg  ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaaaagcaga  atgtgatc ctaggaggta atgacctaga aagactctc taccatctt aaacaaacg  aaagaaggca tggacttctg gatgccatc cactgggtgt aaacacatct agtagttgtt  ctgaaatgtc agttctgata tggaaagcacc cattatgcg tgtggccact ccaataggtg  ctgagtgtag agagtggaaat aagacagaga cctgcctca agagcaaatg agatcatgca  tagagtga tgtatgtga ataatatgt tattcttgt ggtataact taatgaaaac aatgcagtac  agttgaaca ttgtgggtac tattcttgt taattgggc actatttatt tacaatgtt  aggacataa gattgctcaa atcagggttt ctttaagaa tcaatcatgt cagctcgttt  agaaataaca gaagaaaata gaattgacat tgaatctag gaaaattatt ctataattc  cattactta agacttaatg agactttaaa agcattttt aacctcctaa gtatcaagta  tagaaaatct tcatggaatt caaaaagtaa ttggaaatt aggttgaac atatctcta  tcttacgaaa aaatggtagc attttaaca aaatagaaa tgcgaaggca aatgtttatt  taaaagagca gcccaggcgc ggtggctcac gctgtaac ccagcacttt gggaggtga  ggcgggtgga tcacgaggtc aggatcgga gaccatctg gctaacacgg tgaacccgt  ctctactaaa aatgcaaaaa aaattagcgc ggcgtggtgg caggcacctg tagtcccagc  tactcgggag gctgaggcag gagactggcg tgaacccagg aggcggacct tgtagtgagc  cgagatcgcg ccactgtgtc ccagctcggg caacagagca agactccatc tc  MGPRRL1LVA ACFSLCGPLL SARTRARPE SKATNATLDP RSFLLRNPND KYEPFWEDEE P  KNESGLTEYR LVSINKSSPL QKQLPAFISE DASGLTSSW LTLFVPSVYT GVTVVSLPLN  Homo sapiens</p>
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p>tagcttcaag ccactgaaga tggaaaacga gacagttagt gaactgaacc aaacacagct A  tcagccacga gcagtggtgg ccttagaata ccagtggtc accatcttac ttgtactcat  tattgtggc ctgggcatg taggcaacat catggttagtc ctggttgta tgagaacaa  gcacatgagg cccccacaa actgtacct ggtgagcctg gcagttagctg atctcatggt  cttggtggcc gcaggcctcc ccaacataac agacagtatc tacggttctt ggtctatagg  IMAIWVFIK MKVKKPAVVY MLHLATADVL FVSVLPFKIS YFSGSDWQF GSELCRFVTA  AFYCNMYASI LMFTVISIDR FLAVVPMQS LSWRTLGRAS FTCLAIWALA IAGVVPVLVK  EQTIQVPGLN ITTCHDVLE TLLEGYYAYY FSAPSAVFFF VPLIISTVCY VSIIRCLSSS  AVANRSKSR ALFLSAAVFC IFIICFGPTN VLLIAHYSFL SHTSTTEAY PAYLLVCVVS  SISSCIDPLI YYVASSECOR YVYSILCKE SSDPSSSYNS GQLMASKMDT CSSNLNNSIY  KKLLT  Homo sapiens</p>

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	ctatgttggg tgcctctgca ttacttacct ccagttatttg ggaattaatg catcctcttg ttcaataaca gccctttacca ttgagaggta catagcaatc tgtcacccca tcaaaagccca gtttctctgc acattttcca gagccaaaaa gattatcatc ttgtcttggt ctttcacatc tctttactgt atgctctggt tcttcttggt ggatctcaat attagcacct acaaagatgc tattgtgata tctgtgtggt acaagatctc caggaattac tactcaccta ttacctaata ggactttggt gctttttatg ttgtgccaat gatctctggt accgtctctc atggattcat agctagaatc cttttcttaa atccattcc ttcatgacct aaagaaaaact ctaagacatg gaaaaatgat tcaaccatc agaacacaaa tctgaatgta ataactctta atagatgttt caacagcaca gtatcttcaa ggaagcaggt caccaagatg ctggcagtggt ttgtaattct gtttgcccct ttatggatgc cctacaggac tctagtgttt gtaactcatc ttctctccag tcctttccaa gaaaattggt ttttgcctt ttgcagaatt tgcatttatt tcaacagtgct catcaaccg gtgatttaca atctcatgtc ccagaaattc cgtgcagcct tcagaaagct ctgcaactgc aagcagaagc caacagagaa acctgctaac tacagtgtgg cctaaatta cagcgtcatc aaggagtcag acctttcag cacagagctt gatgatata ctgtcactga catttacctg tctgccacaa aagtgtcttt tgatgcacc ttgcttggtt ctgaggtatc ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaagaaa ttgagaatct gtgcagtcac caacaaaagg gagaacatgg ccaatagtca tatgtgaaga cagagcagat cagctcttgt caatgctcta acaaaccc	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	atcctggagct gctcctcgc caatgattcc agcgcctgac agccaggacc ccaggcagca A gcagtgaca gacgtctg accggtcgc cgtcagcagc tctgccggc cgcggcgggtg atcagatggg agcggctgga gcggaccag cagtgagagg cgcacagccg ggacgcgag gcggcggg gcgagaccgc accagccag cggccctcg gcgggacgtg acgcagcgc cggggcgcg gtttgatatt tgacaaattg atctaaaatg gctgggtttt tatctgaata actcactgat gccatcccag aaagtcggca ccagtggtat ttgatatagt gtttgcaaca aatcgaccc aggtgatcaa aatgattctc aactcttcta ctgaagatgg tattaaga atccaagatg attgtcccaa agctggaagg cataattaca tatttgtcat gattcctact ttatacagta tcatctttgt ggtgggaata ttggaaca gcttgggtgt gatagtcatt tactttata tgaagctgaa gactgtggcc agtgttttc ttttgaattt agcactggct gactatgct ttttactgac ttggccacta tgggtgtgtc acacagctat ggaataccgc tggccctttg gcaattacct atgtaagatt gcttcagcca cgtcagttt caacctgtac gctagtgtgt tctactcac gtgtctcagc attgatcgat acctggctat tgttcacca atgaagtccc gccttcgacg cacaatgctt gtgcccagg tcaactgcac catcattgg ctgctggcag gcttggccc tttgccagct ataatccatc gaaatgtatt tttcattgag aacaccaata ttacagtttg tgctttccat tatgagtccc aaattcaac cttccgata	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	<p> MIILNSSTEDG IKRIQDDCPK AGRHNYIFVM IPTLYSIIFV VGIFGNSIVV IVIYFYMKLIK P  TVASVFLNL ALADLCFLLT LPLWAVVTAM EYRWPFGNYL CKIASASVSF NLYASVFLLT  CLSIDRYLAI VHPMKSLRR TMLVAKVTCI IILWLLAGLAS LPALIHNRNVF FIENTNITVC  AFHYESQNST LPIGLGLTKN ILGFLEPFLI ILTSYTLIWK ALKKAYEIQK NKPRNDDIFK  I IMAIVLFFF FSWIPHQIFT FLDVLIQLGI IRDCRIADIV DTAMPITICI AYFNNCLNPL  FYGFLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE  acgtcccagc gtctgagaga acgagtaagc agaaattcaa agcattctgc agcctgaatt A  ttgaaggagt gtgttttagc actaagcaag ctgattttatg ataactgctt taaactcaa  caaccaaaag cataagaact aggagctgct gacatttcaa tatgaagggc aactccaccc  ttggccactac tagcaaaaac attaccagcg gtcttcactt cgggcttggt aacatctctg  gcacaatga gtctaccttg aactgttcac agaaaccatc agataagcat ttagatgcaa  tctctattct ttactacatt atattgttaa ttggatttct ggtcaatatt gtcgtgggta  cactgttttg ttgtcaaaaag ggctctaaa aggtttcttag catatacatc ttcaacctcg  ctgtgggtga ttactcctt ttggctactc tctctctatg ggcaacctat tattctata  gatatgactg gctcttttga gctgtgatgt gcaaaagtttt tggttctttt cttacctga  acatgtttgc aagcattttt ttatcacctt gcattagagt tgataggtag caatctgtca  ttacccctt tctgtctcaa agaagaatc cctggcaagc atcttatata gtccoccttg </p>	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	<p> gggtgggccc tgacaaaaaa tatactgggt ttctgttttc cttttctgat cattcttaca  agttatactc ttatttggaa ggccttaaag aaggttatg aaattcagaa gaacaaaaca  agaaatgatg atatttttaa gataattatg gcaattgtgc ttttctttt cttttctcgg  attcccacc aaatattcac ttttctggat gtattgattc aactaggcat catacgtgac  tgtagaattg cagatattgt ggacacggcc atgctctaca ccaattgtat agcttatttt  aacaattgcc tgaatcctct tttttatggc ttctgggga aaaaatttaa aagatatattt  ctccagcttc taaaatatat tccccaaaa gccaaatccc actcaaacct ttcaaaaaa  atgagcacgc ttctctaccg cccctcagat aatgtaagct catccaccaa gaagcctgca  ccatgttttg aggttgatg acatgttoga aacctgtcca taaagtaatt ttgtgaaga  aggagcaaga gaacattcct ctgcagcact tcactaccaa atgagcatta gctacttttc  agaattgaag gagaaaatgc attatgtgga ctgaaccgac ttttctaaa gctgaaacaa  aagcttttct ttcttttgc aacaagacaa agcaagcca cattttgcat tagacagatg  acggctgctc gaagaacaat gtcagaaact cgatgaatgt gttgatttga gaaattttac  tgacagaaat gcaatctccc tagcctgctt ttgtcctgtt attttttatt tccacataaa  ggattttaga atatatataa tcgttagagg agcaacagga gatgagagtt ccagattgtt  ctgtccagtt tccaaaaggc agtaaaagttt tctgtccggt ttccagctat tagcaactgt  gtacacttg cactggtag tgcacatttt gtacaaagt atgctaagca gtagtctgca  agttgcagat ctttttga aattcaacct gtgtcttata ggtttacct gcaaaaacaa  tgcccgtaag atggcttatt tgtataatgg tgttactaaa gtcacatata aaagtttaaac  tactgtaaa ggtgctgcac tgggtccaaag tagtagtgtc ctccatagat attagtttga  tttaatatct gagaagtgtg tatagtttgt ggtaaaaaga ttatatatca taaagtatgc  cttctgtttt aaaaaaagta tatattctac acatatatat atatgtatat ctatatctct  aaactgctgt taattgatta aaactgtgga agtttatatt tacttataaa taaaataatt  ttattgc </p>	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p>             ttgtgtgtat ggctgtgttg tctcattgc caacatttta ttttcgagac gtcagaacca              ttgaatactt agagtgaaat gcttgcattha tggcttccc acctgagaaa tatgcccaat              ggtcagctgg gattgcttta atgaaaaata tcccttggttt tattatccct ttaatatcca              tagcaacatg ctattttgga attagaaaac acttactgaa gacgaatagc tatgggaaga              acaggataac ccgtgaccaa gtccctgaaga tggcagctgc tgttgttctg gccttcata              ttgtgtgctt tcccttccat gttctgacct tccctggatgc tctggcctgg atgggtgtca              ttaatagctg cgaagtata gactcattg acctggcact tccctttgcc atcctcttgg              gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaac cgttccaac              agaagctccg cagtggtgtt agggttccaa ttacttggct ccaagggaac agagagagta              tgtcttgccg gaaaagcagt tctcttagag aatgggagc ctttgtgtct taaacggaga              gcaaaatgca tgtaatcaac atggctactt gctttgagc tcaccagaat tatttttaag              tggttttaat aaataataa aatttccct aatctttct gaattcttg aaacaaatg              taactatggt tatcgtccag tgacttccag gaatgcccatt tgttttctga tatgtttgta              caagatttca ttgttgagac atatttacaa cctagaagta actgggtgata tatctcaaat              tgtaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaaacatg              cttgtgttcc ttgtgtgggt ttatatcca tttttatcag gatttctctc tgaaccagaa              ccagctcttc aactcattgc atcatttaca agacaacatt gtaagagaga tgagcacttc              taagtgtgagt atattataat agattagtac tggattattc aggttttagg catatgcttc              tttaaaaacg ctataaatta tattctctt gcatttccat tgagtggagg tttatagtta              atctataact acataattgaa tagggctagg aatatagatt aatcataact cctatgcttt              agcttatttt tacagttata gaaagcaaga tgtactataa catagaattg caatctataa              tatttgtgtg ttcactaaac tctgaataag cactttttaa aaaactttct actcatttta              atgattgttt aaaggtttct atttctctg atacttttt gaaatcagta aacactgtgt              attgtgttaa aatgtaaaag tcacttttca cactcttgac ttttagatg tgctgctttg              atatatagga cattgatttg atttttatta ttaatgcttt ggttctgggt tgttctctaa              aatatctggg tggcttaaaa aaaactcttt aacttgtaat aaacctttaa ctggcatagg              aaatgggtatc cagaatggaa ttttgctaca tgggggtctgg gtggggggcaa agagaccag              tcaattacat gtttggtagc aagaaaggaa cctgtcaggg cagtacaatg tgactttgaa              aatatatacc gtgggggtag tttacccta tatctataa cactgtttgt tccagaatct              gtatgattct atggagctat tttaaaccaa ttgcaggtct aga              MKGNSLIATT SKNITSLHF GLVNISGNNE STINCSQKPS DKHLDAIPIL YYIIFVIGFL P              UNIVVTLFC CQKGPVKVSS IYIFNLAVAD LLLLATLPLW ATYYSRYDW LFGPVMCKVF              GSFLTNMFA SIFFITCMV DRYQSVIYFP LSQRNPWQA SYIVPLVWCM ACLSSLPTFY              FRDVRTIEYL GVNACIMAF PEKYAQWSAG IALMKNILGF IIPLIFIATC YFGIRKHLK              TNSYGNRIT RDQVLKMAA VVLAFLIWL PFHVLTFDA LAWGVINSC EVIAVIDIAL              PFAILLGFTN SCVNPFLYCF VGNRFQQLR SVFRVPITWL QGKRESMSCR KSSSLREMET              FVS           </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p>             atggccagta cagagtcttc cctgttgaga tccctaggcc tcagcccagg tccctggcagc A              agtgaggtgg agctggactg ttggtttgat gaggatttca agttcatcct gctgcctgtg              agctatgcag ttgtctttgt gctgggcttg ggccttaacg cccaacct atggctcttc              atcttccgcc tccgacctg ggatgcaacg gccactaca tgttccacct ggcattgtca           </p>	Homo sapiens

332	5072	Pyrimidinerg NP_002556.1 ic Receptor P2Y4	gacacctgt atgtgctgtc gctgcccacc ctcatctact attatgcagc ccacaaccac tgcccccttg gcaactgagat ctgcaagttc gtcgcttttc tttctatttg gaacctctac tgcaagtctc ttttctctac ctgcatcagc gtgcacgct acctgggcat ctgccacca cttggggcac taagctgggg ccgcccctgc ctgcagggcc ttctctgctt ggcagtttgg ttggtogtag ccggtctgct cgtgcccac ctgttctttg tcacaaccag caacaaaggg accacgctcc tgtgccatga caccactgg cctgaagagt ttgaccacta tgtgcacttc agctcggcg tcatggggct gctctttggc gtgcctgccc tggcactct tgtttgctat ggactcatgg ctgctgctct gtatcagccc ttgcagggct ctgcacagtc gcttctogc ctcggctctc tcgcgacccat agctgtggtg ctgactgtct ttgctgtctg ctctgctct ttccacatca ccgcgacccat ttactacctg gccaggctgt tggaaagctga ctgccagta ctgaacattg tcaactgtgt ctataaagt actcgcccc tggccagtcg caacagctgc ctggatccctg tgcctactt gctcactggg gacaaatct gacgtcagct ccgtcagctc tgtgtgtgtg gcaagcccca gcccgcacg gctgctctt cctggcact agtgcctctg cctgaggata gcagctgcag gtggggcgcc acccccagg acagtagctg ctctactct aggcagata gattgtaa	Homo sapiens
333	5117	Vasopressin NM_000706 V1A Receptor	taattgcttg aaggattttt tccagacagg tggctggaa acctttacc tattacttc A catccctgaa ccatttcaat ctctgctc ctgatatct tggagaaat gaaccaacac aacacagctt tcagttttta gagcatttcc ccatacaga acattgtctt acttgatctt ccgatgacc tcaacaacag gaaaggcagg tctttcatt tccatttata agacgcacag accaggtatt atctagccac aggaagcagg actccagatt tcaagtcacg catctcaacg tgacaacctt ggtaaactct catgaacgga ctggatagta aagtggaatt attactgaga actgcaatga ataaaactct ttgcattttt tgctacgtt tcacagaggg tgatatctt ctgagggcaat taaaattata ccacggccac aatactgaaa cgttctgacc acaaaagta tgctctgca tctacacagc agataactgc agaaacggct tctttcttc ctgtaaaaat tgctgaaaa cagctcccc ttgctgtccg tggaggcata tcttcacca cgttaaaaca gagctgagg agatgcatt tctgctccc tccgcccctg cagaggggct ccagctgttc agagtaacgg attactaggt agtggtgtt tctctctct tcccaggcc tcttctctt ctttgagatt gcctctttct tactctctag cacaggagcc gggcggttt tctgtccctt gcctggaca gcactgctg gatggcgtt gtcgggcagc tgctctttgt ccaccaaaa agatgtccc acgactcagt agtaaccaga cgttccccac ggaccactgc ggcctaat cggccatccc cgctgtggga atcaggtttt tccgcagaa accccagga atctagagaa aactccttaa gtccctagtc tccatagaga aaacaggag acactcccc caaacccgc tgtgaatata ggcacagcag ccactggggc ctgaaagtga tgagtgcgtt ctcccgctg caaacatagg gtaataaata gcatgcatca agacgtttac taggaagaga tagctcttta	Homo sapiens

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tatttttaa ggaataatca taaccacct agctttatat tttgtgttta gttctttta  
ttttcattc taacataagt aagacttgat tggtttaaaa gtcacataaa atgcggcact



334	5117	Vasopressin V1A Receptor	NP_000697.1	<p>atctctgaac aaagagagct catcatcagt cttaatatct agagaaact tcagagaaat  tatgttttca tccattaaaa ttaatttggt catcagaaaa tgcagcctta aacagtgtcc  aggagatggg atggtacctc ctaggagtac aagtgcctgg ggtgtaata gctcctgctc  attgtggcca gtttagagtt ctattagaag ctataatca ccttgcatct caaaatggtg  actttacaac tggcagtggc ctctctttgg ttctcacat attattggc aagaaaagca  tgaaaactga gatgtgaag gtgagaggaa atgttgactg gcaaaaaata tctttttcc  ccactgcaa ggttgtttta agtcagatt tgtataagga agccaaatt ttattaaag  agtagaaaag gattgcttaa ggtactctgg actttctctt ggacattgta aacgtatttt  gatcagtatt acaagggtat cctgtgctat cgtggacatt acaagatca ttatctcat  gtttgggaa ttc</p>	Homo sapiens
335	5118	Vasopressin V1B Receptor	NM_000707	<p>MRLSAGPDAG PSGNSSPPWP LATGAGNTR EAEALGEGNG PPRDVRNEEL AKLEIAVLAV P  TFAVAVLGNS SVLLALHRTF RKTSRMHLFI RHLSLADLAV AFFQVLPQMC WDITYRFRGP  DWLCRVVKHL QVFGMEASAY MLVMTADRY IAVCHPLKTL QQPARRSRILM IAAWVLSFV  LSTPOYFVFS MIEVNNVTKA RDCWATFIQF WGSRAYVTWM TGGIFVAPV ILGTCYGFIC  YNIWCNVRGK TASRQSKGAE QAGVAFQKGF LLAPCVSSVK SISRAKIRTV KMTFVIVTAY  IVCWAPFFII QMWSVWDPMS WTESENPTI TITALLGSLN SCCNPWIYMF FSGHLIQDCV  QSFPCQNMK EKENKEDTDS MSRRQTFSN NRSPTNSTGM WKDSPKSSKS IKFIPVST</p>	Homo sapiens

Homo  
sapiens

336 5118 Vasopressin NP\_000698.1 MDSGLWDAN PTPRGTLAP NATTPWLGRD EELAKVEIGV LATVIVLATG GNLAVLITLG P  
V1B Receptor  
 QLGKRSRMH LFLVHLALTD LAVALFQVLP QLLWDITYRF QGPDLLCRAY KYLQVLSMFA  
 STYMLLAMTL DRYLAVCHPL RSLQPPGOST YLLIAAPWLL AALFSLPQVF IFSLREVIQG  
 SGVLDWADF GFWGPRAYL TWTTLAIFVL PVTMLTACYS LICHEICKNL KVKTQAWRVG  
 GGGWRTWDRP SPSTLAATTR GLPSRVSSIN TISRAKIRTV KMTFVIVLAY IACWAPFFSV  
 QMWSVWDKNA PDEDSTNVAF TISMLLGNLN SCCNPWIYMG FNSHLLPRPL RHACCCGGPQ  
 PRMRRLSDG SLSSRHITLL TRSSCPATLS LSLSLTLGR PRPEESPRDL ELADGEGTAE  
 TIIF

Homo  
sapiens

337 5119 Vasopressin NM\_000054  
V2 Receptor  
 agaagatcct gggttctgtg caticgtctg tctgaccatc cctctcaatc ttccctgccc A  
 aggaatggcc atactggcc cgcacacgtg cacacacgcc aacaggcatc tgccatgctg  
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 gtcagcagct gtggccaaga ctgtgagat gacgtagtgc attgtggctg tctatgtgct  
 gtgctgggca ccttcttcc tgggtgcagct gtgggcccggt tgggaccggg aggcacctct

338	5119	Vasopressin V2 Receptor	NP_000045.1	MMASTTSVAV ALARRGRRGH VGMYSYMI RNVEGSGVT SERPGRRRG PLEGAPFVLL ASSSLAKDTS	PGHPSLPSLP WAPIHVFIGH LAMTLDRHRA DCWACFAEPW RRTGYVTWIA HVSAAVAKTV NPMIYASFSS SNSSQERPLD LCLADLAVL ICRPMLAYRH GSGAHNRPV LMVFVAPTIG IAACQVLIFR EIHASLVPGP RMTLVIVVY VLCWAPFFLV QLAAWDPEA SVSSELRSL CCARGTPPS LGPQDESCIT	TRDPLLRAE FQVLPQLAWK ATDRFRGPD LVAWAFSLLL SLPQLFIFAQ IAACQVLIFR EIHASLVPGP RMTLVIVVY VLCWAPFFLV QLAAWDPEA SVSSELRSL CCARGTPPS LGPQDESCIT	Homo sapiens
339	5133	Peropsin	NM_006583	gaataagcct ataatttagg aacacaatat taatagttct ttattaacct cctcagatct tgaatatatt acctgacct tgattctggg ctagttatgc gatcttttgt tgatgtttta gcactgagtc tcactgatctg cttttggtga aatctcttac caatgcttgc ccatggatgt acgtatcaa gatcaagtgc tgcttccgtt acttattgct	tccttgga cactctctcc ctattctcc ctaataaaa ttggagctct tttccacatg gcaaggggtc tactcatgtt gctggccagc ctcaacagct ctgeaagct tgctctgtg tgccccggg ctcctccctg ctttgagaag gtggagaatt ccacagcccc gactgtgggg gcctgaggag gcctgaaaag cctccctect tccttgga	tgctggccagc ctcaacagct ctgeaagct tgctctgtg tgccccggg ctcctccctg ctttgagaag gtggagaatt ccacagcccc gactgtgggg gcctgaggag gcctgaaaag cctccctect tccttgga	Homo sapiens

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgacattta acttgccctg ctcc	Homo sapiens
341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	MLRNILGSS DSKNEDGSVF SQTEHNIVAT YLIMAGMISI ISNIIVLGIF IKYKELRTPT P NAILIINLAVT DIGVSSIGYP MSAASDLGYS WKFGYAGQOV YAGLNIFFGM ASIGLLTVVA VDRYLITICLP DVGRMTTNT YIGLILGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR KNDRSEFVSYT MTVIAINFIV PLTVMEFYCY HTLSIKHHT TSDCTESLNR DWSDDIDVTK MSVIMICMFL VAWSPYSIVC LWASFGDPKK IPPPMALIAF LFAKSSSTFYN PCIYVVANKK FRRLAMFEK CQHTQMPVT SILPMDVSN PLASGRI ggactttaga agccgttgct gccctctctg tcacctgaag cggggccctc tccatccca A cccttgcccc gctccctgc cccacccggg ccggccctgc ccgcgcgg accctggcat gtcaagacct ggtccgcgc tgccctgcca gccgcggaa cccgcgggc cccgcgagct aggatgagg gcaaggccgc cgcgcgcgg gcggccgcgg gacgacacgc ggggcccggg ctgctgctgc tgetgggacg ccgcgcgcgg ggtgcaggga aagtctctcg gctacttctc cgcggccgc ccgagccgt gcgcacgct ggtgcaggga ggcctgctcc tggacgtac gcaaccgga cccgcgggc gtgtccccg ccaagcctc gcctgctcc ccgtgccct gcagcggccc cggccgcgtg tacactctct acatgaagt ggccaaaggc cctctctgag tccacgcga cctacctgg cgtggagagc cgacactacc agttcgactc ctctctgag tccacgcga cctacctgg gcgtggagagc ttcgacgagg tgetgcggct ctgcgacccc tccgacccc tggccttctt gcaggccagc aagcagttcc tgcagatgc gcgccagcag ccgcgccagc acgacgggt cccggccccc gcccggccgc tgggccccac cgacgacttc tccgtggagt acctggtggt ggggaacccg aaccacagcc gtgcgcctg ccagatgctg tgcgctggc tggacgcgtg tctggccgt agtcgcagct cgcacccctg cgggatcatg cagacccctt cgcctgctt gggcggcgag gcgggcggcc ctgcccgggg accctggcc ccccgcggg atgtctgctt gagagatgcg gtggtggtg gccctgaata ctgcctacc agcctgacc aggacccggg gcggcacgac gccacaggcg gctggaagct gtggtccctg tgggcccgaat gcacgcggga ctgcggggga ggcctccaga cgcggacgcg cactgacctg ccgcgcggg gcgtggagg cggcggctgc gagggggtgc tggaggaggg tgcacagtgc aacgcgagg cctgcggccc cgtgggggc accagctccc ggagccagtc cctgcggtcc acagatgcc ggccggcgca ggagctgggg gacgagctgc agcagtttg gtccccagcc cccacagacc gtgacccagc agccgaggag tggtccctgt ggagcgtgtg ctccagcacc tgcggcgagg gctggcagac ccgacgcgc ttctgctgt cctcctcta cagacgcag tgcagcggac cctgcgca gcagcggctg tgcaacaact ctgcccgtg cccagtgcac ggtgctggg atgagtgtc gccctggagc ctctgctcca gcacctgtg ccgtggcttt cgggatcgca cgcgcacctg caggccccc cagtttggg gcaacccctg tgaggccctt gagaagcaaa ccaagttctg caacattgccc ctgtgccctg gccgggcagt ggatggaaac tggagatgagt ggtcgagctg gagcgcctgc tcgcagact gctcccagg ccgacagcag cgcacgcgtg aatgcaacgg gccttctac gggggtgcgg agtgccagg ccactgggtg gagccccg actgcttctt gcagcagtc ccagtggatg gcaagtggca ggcctgggcg tcatggggca gttgcagct cactgtggg gctggcagcc agcgacggga gcgtgtctgc tctgggccc tcttcggggg agcagcctgc cagggccccc aggatgagta ccggcagtc ggacccagc ggtgtccca gccccatgag atctgtgatg aggaactt tgggtgctgt atctggaag agacccagc gggagagggtg	Homo sapiens

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254/448

342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	MRGQAAAPGP	VWILAPLILL	LLLLRRARA	AAGADAGPG	EPCATLVQK	FFGYFSAAV	P	Homo sapiens
				ccacctccc	agcagccccct	gcccccccg	cccaatctgg	agcgggcacc	ccccagcctg		
				gggatcccc	gggagcctgc	cgcccatccg	ggaccagca	cggggccccag	caccaagaac		
				gagaatgtcg	ccacctgtgc	tgtgagctcc	ctggagcggc	ggaagtcgcg	gtatgcagaa		
				ctggactttg	agaagatcat	gcacaccccg	aagcgccacc	aagacatgtt	ccaggacctg		
				aaccggaagc	tgcagcacgc	agcggagaag	gacaagaggg	tgtctggggc	ggacagcaa		
				ccgaaaaagc	agcagacgcc	caacaagagg	ccctgggaga	gcctccggaa	agccccggg		
				acgcccacgt	gggtgaagaa	ggagctggag	ccgctcgagc	cgctcgccgt	ggagcttcgc		
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				ctccagaccg	aggtctgagc	gggtggcggg	cgccacgca	ctgggccacg	gaggagggat		
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				accagagcca	gatgcaggac	aggaggcggc	ccggccagcg	ggcacaggcg	accagagggc		
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				ctgcggagga	gctgctgct	tggcccgcc	ggctgggac	cgttttttaa	acacccccat		
				ccctcgggaa	gcagccagct	ccccacact	tccaggggcc	tagggccctc	ctagacccag		
				gtggaggggca	cagccctccg	accctcatgg	ccccccaggg	caggactgag	tccctccag		
				gaagaagcag	gggggaatct	atttttctc	tcctttctt	ttcttcaata	aaaagaatta		
				aaaccccaaa	aaaaa						
				FPANASRCSW	TLRNPDP	RY	TYMKVAKAP	VPCSFGPRVR	TYQFDSFLES	TRTYLGVSF	
				DEVLRLCDPS	APLAFLOASK	QFLQMRROQP	PQHDGLRPRA	GPFGPTDDFS	VEYLVGNRN		
				PSRAACQMLC	RWLDACLAGS	RSSHPCGIMQ	TPCACLGGEA	GGPAAGPLAP	RGDVCRLDAV		
				AGGPENCLTS	LTQDRGGHGA	TGGWKMLSLW	GECTRDCGGG	LQTRTRTCLP	APGVEGGGCE		
				GVLEGRQCN	REACGPAGRT	SSRSQSLRST	DARRREELGD	ELQQFGFPAP	QTGDPAAEEW		
				SPWSVCSSTC	GEWQTRTRF	CVSSSYSTQC	SGPLREQLC	NNSAVCPVHG	AWDEWSPWSL		
				CSSTCGRGR	DRTRTCRPPQ	FGGNPCEGPE	KQTRFCNIAL	CPGRAVDGNW	NEWSWSACS		
				ASCSQGRQQR	TRECNGPSYG	GAECQGHWE	TRDCFLQCCP	VDGKWQAWAS	WGSCSVTCGA		
				GSQRRERVC	GPFFGGAACQ	GPQDEYRQCG	TQRCPEPHEI	CDEDNFGAVI	WKETPAGEVA		
				AVRCPRNATG	LILRRCELDE	EGIAWEPPT	YIRCVSIDYR	NIQMTREHL	AKAQRGLPGE		
				GVSEVIQTLV	EISQDGTSYS	GDLLSTIDVL	RNMTFIFRA	YISPTPGDVQ	NFQILSNLL		
				AEENRDKWEE	AQLAGPNAKE	LFLRVEDFVD	VIGFRMKDLR	DAYQVTDNLV	LSIHKLPAASG		
				ATDISFPMKG	WRATGDWAKV	PEDRVTVS	KS	VFSTGLTEAD	EASVFVVGTV	LYRNLGSFLA	
				LQNTTVLNS	KVISVTVKPP	FRSLRTPLEI	EFAHMYNGTT	NOTCILWDET	DVPSSSAPPQ		
				LGPWSWRGCR	TVPLDALRTR	CLCDRLSTFA	ILQLSADAN	MEKATLPSVT	LIVCGGVSSL		
				TLLMLVIYV	SWRYIRSER	SVILINFCLS	IISNALILI	GQTQTRNKVM	CTLVAAPLHF		
				FFLSSFCWL	TEAWQSYMAV	TGHLRNRLIR	KRFCLGWGL	PALVVAISVG	FTKAKGYSTM		
				NYCWLSLEGG	LLYAFVGPAA	AVVLNMVIG	ILVFNKLVS	DGIDTKLKE	RAGASLWSSC		
				VVLPPLALTW	MSAVLAVTDR	RSALFQILFA	VDSLEGFVI	VMVHCILRE	VQDAVKCRV		
				DRQEEGNGDS	GGSFQNGHAQ	LMTDFEKD	VD	LACRSVLNKD	IAACRTATIT	GTKLRPSLPE	
				EEKLKLAHAK	GPPTNFNSLP	ANVSKLHLHG	SPRYPGGPLP	DFPNHSLTLK	RDKAPKSSFV		

343	5520	Brain-Specific Angiogenesis Inhibitor 2	NM_001703	<p>           GDGDIFFKKLD SELSRAQEKALDTSYVILPTATATLRPKPKKEPKYSIHID QMPQTRLIHL            STAPEASLPA RSPSPRQPPSGPPEAPPAQ PPPPPPPPP PPOQLPPPP NLEPAPPSLG            DPGEPAHPG PSTGPSTKNE NVATLSVSSL ERRKRYAEL DEEKIMHTRK RHQDMFQDLN            RKLQHAEEKD KEVLGPDSKP EKQQTPNKRP WESLRKAHGT PTWVKKELEP LQSPPLELRS            VEWERSGATI PLVQDIIIDL QTEV         </p>	Homo sapiens
				<p>           gccgcgcggg agagcgggag cctcggccct ccgcgcgggt gcagctacct accctgcgcc A            cggccaggtc cccgacttag ggatggcaaa cttggccccc gtggccgccc ccgccagcgc            cggccccgc tctgtctgt gacgcgcgcc aggaatcca cagcagtgat acatgtgacg            tccacactga cagtgccttc ctgtgggcat ggtcagggt gtgcgcagtt cctggcacac            tggctgtaac tccgccccct tctctccctc tcagtaaaag aagattacgc ggtgacatgc            ctacagctg atcacgacac acggggatgg agagcaagag ttatggagaa tacaggttgg            atgggcaagg gacataggat gacccagcc tgcacctct tactgtctgt gattctgtcc            ctgcgcctgg ccacgcctt cgaccccgcc cccagtgcct gctctgccc ggctcgggt            gtgctctacg gggccttctc gctgcaggac ctttttcta ccatgcctc gggctgtctc            tggaccctgg agaaccctga cccaccaaag tactccctct acctgcctt caaccgcag            gagcaggtgt ggcacactt tgccccccgc ctgctgcccc tggaccacta cctggtcaac            ttacctgcc tgcggcctag ccccgaggag cgggtggccc agcggagtc agagtgggg            cggccagaag aggaggaggc agagcgcca cgggggttgg agctgtgcag cggctcaggc            cctttacct tctgtcactt cgacaagaac ttctgcagc tgtgcctgc ggtgagccc            tccgagggcc cgcgcctgct ggcgcctgct ggcctagctt cccgtttgtt cgaagttctg            ctcatcaaca acaacaactc tagccaattc acctgtggtg tgcctgcgc ctggagtgag            gagtgtggcc gcgctgcgg cagggcctgc ggccttgcct agccagctg cagctgcct            ggagaggcgg gggccggctc caccacacc acatctccag gccctcctgc tgcacacc            ctgtccaatg cctgtgtgc cgggggcccc gccccacctg ctgaggccga ttgtcactcg            gggagcagca atgatctgtt cacaaccgag atgagatatg gtgaggagcc ggaagaggaa            ccgaaagtga aaaccagtg gccgaggtct gcagatgagc ctgggctata catggcgcag            acaggcgacc cggcggctga ggagtgttcc ccgtggagcg tgtgttccct gacgtgtggg            cagggtctgc aggtgcggac ccgtcctgt gtgtcctccc cctatgggac cctgtgcagc            gggccctgc gggagaccag gccctgcaac aatcagcca cctgccagt gcacggcgtg            tgggaggagt gggggtcctg gagcctgtgc tccgcagct cggggcgggg gtcccggagc            cggatgcgga cctgcgtgcc cccccagcac gggggcaagg cctgcgaggg tccgtgactg            cagactaagc tctgcagtat ggctgcctgc ccgttggaa ggcagtggtt agaatgggt            ccttggggcc catgtccac gtccgtgtcc aatgggacc aacagcgca cggaaagtgc            agcgtggcgg gccagcctg ggcacatgc acgggtgccc tcactgacac ccgggagtg            agcaacctg agtgcccgcc cactgatagc aagtgggggc catggaatgc gtgagcctg            tgccttaaga cgtgtgacac aggttgccag cgcgccttc gcatgtgcca gcccacgggc            acgcagggtt acccttgga gggcacagg gaggaggtga agccttgtag tgagaagagg            tgcacagcct tccatgagat gtgcagggat gactacgtga tgcctgatgc gtggaagaag            gcagctgctg tccagatcat ctacacaag tgcctccga atgcctcagg gtctgccagc            cgcgcgtgct tctcagtg ccaaggcgtg ggcactggtt ggcctgcag ctttgcctgc            tgcactctcc atgagtaccg ctacctgtat ctgtcactta gggagcactt ggcgaagggg         </p>	

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Homo  
sapiens

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Brain-  
Specific  
Angiogenesis  
Inhibitor 3

346 5521

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ctgacctgca tgtacctggt ggtgtttgtc tgtgttctgg tggggaactc tctggtgctg  
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ccccctggctg acctgggtgt tgtctgact ctgcccttct ggcctatgc aggcatecat  
gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaacttc  
tacacgtcca tgtctatcct cactgcatc actgtggatc gtttcatgt agtggttaag  
gccaccaagg cctacaacca gcaagccaa ggaatgacct ggggcaaggt caccagctg  
ctcatctggg tgatatccct gctggtttcc ttgccccaaa ttatctatg caatgtctt

Homo  
sapiens

NM\_006564

SIV/HIV  
Receptor  
BONZO

347 6031

348	6031	SIV/HIV Receptor BONZO	NP_006555.1	<p>aatctcgaca agctcatatg tggttaccat gacgaggcaa tttccactgt ggttcttgcc  accagatga cactggggtt cttcttgcca ctgctacca tgattgtctg ctattcagtc  ataatcaaaa cactgcttca tgtggaggc ttccagaagc acagatctct aaagatcatc  ttcttggtga tggctgtgtt cctgctgacc cagatgcctt tcaacctcat gaagtccatc  cgcagcacac actgggaata ctatgccatg accagcttct actacacat catggtgaca  gagggccatg catacctgag ggcctgcctt aacctgtgc tctatgcctt tgcagcctg  aagtttcgaa agaactctg gaaactgtg aaggacattg gttgcctccc ttaccttggg  gtctcacatc aatggaatc ttctgaggac aattccaaga cttttctgc ctcacacaat  gtggaggcca ccagcatgtt ccagttatag gctttgccag ggtttogaga agctgctctg  gaatttgcaa gtcattgctg tgcctctctg atgtggtgag gcaggctttg ttatagctt  gcgcattctc atggagaagt tatcagacac tctggctggt ttggaatgct tcttctcagg  catgaacatg tactgttctc ttcttgaaca ctcatgctga aagcccaagt aggggtctca  aaatttttaa ggacttctct tctccatct ccaagaatgc tgaaccaag ggggatgaca  tgtgactcct atgatctcag gttctccttg attggactg gggctgaagg ttgaagaggt  gagcacggcc aacaaagctg ttgatggtag gtggcacact gggcgcccaa gtcagaaggg  ctctctgac tactgggcaa agagtgtaga tcaagagcag agtgaataca agtgcctgga  ccaccaggca cctcacagaa atgagatcag gctctgcctc acctggggc ttgacttttg  tataggtaga tgttcagatt gcttgatta atccagaata actagacca gggactatga  atgggcaaaa ctgaattata agaggctgat aattccaagtg gtccatggaa tgcctgaaa  atgtgcacaaa cagcgtttta gactgtaatg aattcaagca gcatttctga agtggactct  ttggtggctt tgcattttta aatgaaatt ttccaatgct tgcacacaa acgtatgtaa  atgtatatc ccacacatc acacacatc gtcatatatt actagcatat gagtttcata  gctaagaat aaaaactgta aagtctccaa act</p>	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p>KLQSLTDVFL VNLPLADLVE VCTLPEFWAY GIHEWVFQV MCKSLGIYT INFYTMILL  TCITVDREIV VKKATKAYNQ QAKRMTWGV TSLLIWISL LVSLPQIYG NVFNLDKLLC  GYHDEAISTV VLATQMTLGF FLPLTMIVC YSVIIKTLH AGGFQKHRSI KIIFLWMAVF  LLTQMPFNLM KFIKSTHWEY YAMTSFHYTI MVTEATAYLR ACLNPVLYAF VSLKFRKNFW  KLVKDIGCLP YLGVSHQWKS SEDNSKTFSA SHNVEATSMF QL</p>	Homo sapiens

350	6204	Lysophosphat NP_004711.2 idic Acid Receptor Edg4	ctgggtcaaga ctgttgtcat catcctggg gcgttcgtgg tctgtggac accaggccag gtgggtactgc tctggatgg ttaggctgt gagtctctga atgtcctggc ttagaaaaa tacttccctac tgttgccga ggcacactca ctggtaaatg ctgtgtgta ctcttgccga gatgtgaga tgcgcgcac ctccgcgcg ctctctgtgt gcgcgtgcct cgcgcagtc accgcgagt ctgtccacta tacatctct gcccaggag gtgccagcac tgcgcatcatg cttcccgaga acggccacc actgatggac tccaccctt agctacctt aacttcagcg gtacgcggca agcaacaaat ccacagcccc tgatgacttg tgggtgctcc tggctcaacc caaccaacag gactgactg	Homo sapiens
351	6213	C-C Chemokine Receptor 5	cttcagatag attatatctg gagtgaagga tctgcccacc tacgtatctg gcatagtatt A ctgtgtagt ggatgagcag agaacaaaa caaaataatc cagtgaagaa agcccgtaaa taaaccttca gaccagagat ctattctcca gcttatttta agtcaactt aaaaagaaga actgttctct gattcttctc gcttcaata cacttaatag ttaactcca cctccttca aaagaaaacag catttctcat ttttatactg tctataatg agtctcatctg gccagaagag ctgagacatc cgttccccta caagaaatc tcccgggtg gaacaagatg gattataag tgtcaagtcc aatctatgac atcaattatt atacatcgga gccctgcaa aaaatcaatg tgaagcaat cgcagccgc ctcctgctc cgtctactc actggtgttc atctttggtt tgttgggcaa catgctggtc atctctatcc tgataaactg caaaggctg aagagcatga ctgacatcta ctgctcaac ctggccatct ctgacctgtt ttctctctt actgtccctt tctgggtca ctatgctgc gccagtggtg actttggaaa tacaatgtgt caactcttga cagggtctta ttttataggc ttcttctctg gaattctct catcatcctc ctgacaatcg ataggtaact ggtgtgctc catgctgtgt ttgctttaa agccaggacg gtcacctttg ggttgggtgac aagtgtgac acttgggtg tggctgtgtt tgctctctc ccaggaatca tctttaccag atctcaaaa gaagtcttc attacacctg cagctctcat ttcccataga gtcagtatca attctggaag aatttcaga cattaaagat agtcatcttg gggtgtgtcc tgcgctgct tgtcatggtc atctgtact cgggaatcct aaaaactctg cttcggtgtc gaaatgagaa gaagaggcac agggctgtga ggcttatctt caccatcatg atgtttatt ttctctctg ggctccctac aacattgtcc ttctctgaa caccttccag gaattctttg gctgaataa ttgcagtgc tctaacaggt tggaccaagc tatgcaggtg acagagactc ttgggatgac gcaatgctgc atcaacccca tcatctatgc ctttgtcggg gagaagtcca gaaactacct cttagtcttc ttccaaagc acattgcaa acgcttctgc aaatgctgtt ctattttcca gcaagaggct cccgagcgag caagctcagt ttacaccga tccactggg agcaggaaat atctgtgggc ttgtgacacg gactcaagt ggctgggtgac ccagtcaag ttgtgcacat ggcttagttt tcatacacg cctgggctgg ggttggggtg ggagaggtct tttttaaag gaagtactg ttatagaggg tctaatgatt atccattat ttggcatctg tttaaagtag attagatctt ttaagcccat caattataga aagccaaatc	Homo sapiens

aaaaatgtt gatgaaaaat agcaaccttt ttatctcccc ttacatgca tcaagttatt  
 gacaaactct ccttcaactc cgaagttcc ttatgtatat ttaaaagaaa gctcagaga  
 attgctgatt cttgagtta gtgactgaa cagaaaatacc aaaaattattt cagaaatgta  
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 gtgattttcc ctccaagta tggtaataa gtttcaacta cttagaacca ggcgagagac  
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 agaaggttta ctctgtggcc aaaggagggt caggaaggat ggcatttag ggcaaggaga  
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 gggaaggagg gaggtattcg taaggatggg aaggagggag gtattcgtgc agcatatgag  
 gatgcagagt cagcagaact ggggtggatt tggtttgaa gtgagggta gagaggagtc  
 agagagaatc cctagtcttc aagcagattg gagaaacct tgaaaagaca tcaagcacag  
 aaggaggagg aggaggttta ggtcaagaag aagatggatt ggtgtaaaag gatgggtctg  
 gttgcagag cttgaacaca gtctcaccga gactccaggc tgcctttcac tgaatgcttc  
 tgacttcata gatttcttc ccattccagg tgaataactg aggggtctcc aggagagac  
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 ctaggtagg attgattacc tagtagtcat ttctggggtt gttgggagga tctatgagg  
 caaccacag cagcatttag cacatactac acattcaata agcatcaaac tcttagttac  
 tcattcaggg atagcactga gcaaagcatt gagcaaaagg gtcccatata ggtgaggaa  
 gcctgaaaaa ctaagatgct gcctgccag tgacacaaag tgtaggtatc atttctgca  
 tttaacctgc aataggcaaa ggggggaagg gacatttca ttbgaaata agctgccttg  
 agccttaaaa' ccacaaaaag tacaatttac cagctccgt atttcagact gaatgggggt  
 ggggggggct ccttaggtac ttattccaga tgccttctcc agacaaacca gaagcaacag  
 aaaaaatcgt ctctccctcc ctttgaatg aatatcccc ttatgtttt ggtatattca  
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 actttctcag cctctgaata tgaaaggatga gcatgtggc tgtcagcagg aagcaacgaa  
 gggaatgtc ttctcttttg ctcttaagt gtggagagtg caacagtagc ataggacct  
 accctctgg ccaagtcaaa gacattctga catcttagta ttgcatatt cttatgtatg  
 tgaaggttac aaattgcttg aaagaaaaa tgcactcaat aaaaacacc ttcta  
 NP\_000570.1 MDYQVSSPIY DINYTSEPC QKINVKQIAA RLPLPLYSLV FIFGVGNML VILINCKR P  
 LKSMIDIYLL NLAISDLFFL LTPFWAHYA AAQWDFGNM COLLGLYFI GFFSGIFFII  
 LLTIDRYLAV VHAFALKAR TVTFGVVTSV ITWVAVFAS LPGIIFTRSQ KEGLHYTCSS  
 HFPYSQYQFW KNFQTLKIV LGLVPLLM VICYSGLIKT LLRCRNEKKR HRAVRLIFTI  
 MIVYFLFWAP YNIVLLNTEF QEFFGLNCS SSNRLDQAMQ VTETLGMTHC CINPIYAFV  
 GEKERNYLLV FFQKHIAKRF CKCCSIFQQE APERASSVYT RSTGEQEISV GL

Homo  
sapiens

353	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NM_003965	<p>tctgtctctg gggaaagtgg cacacgttaa aagaaatgtt tatttcagtc ttctgaaata A</p> <p>gggaattact ctggtaaaaa ttagctctca gaaagggaaa gtgggctgt atgaatccag</p> <p>gtccagtttg ttgtttcttc caggataaag cagctgtcgg aggggaaaa catctcccat</p> <p>ttctccacag ggcagctctga agatggccaa ttacacgtg gcaccagag atgaatatga</p> <p>tgctctcata gaagtggaac tggagagcga tgaggcagag caatgtgaca agtatgacgc</p> <p>ccaggcactc tcagccagc tgggtgccat actctgctct gctgtgttg tgatcgggtg</p> <p>cctggacaat ctcttggttg tgotattcct ggtaaaatat aaaggactca aacgcgtgga</p> <p>aaatatctat ctcttaaaat tggcagtttc taaatttctt ttctgtctta ccttgccctt</p> <p>ctgggctcat gctggggggc atcccatgtg taaaattctc attgactgt acttcgtggg</p> <p>cctgtacagt gagacatttt tcaattgcct tctgactgtg caaaggtaac tagtgttttt</p> <p>gcacaagggc aactttttct cagccaggag gaggtgtccc tgtggcatca ttacaagtgt</p> <p>cctggcatgg gtaacagcca ttctggccac ttgctctgaa taegtgtgtt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcatt tagcagaact ccttctctgc cagctgatga</p> <p>gacattctgg aagcattttc tgactttaaa aatgaacatt tgggttcttg toctccccct</p> <p>attatttttt acattttctt atgtgcaaat gagaaaaaca ctaaggttca gggagcagag</p> <p>gtatagcctt ttcaagcttg tttttgccat aatggtagtc ttcttctga tgtgggcgcc</p> <p>ctacaatatt gcatttttcc tgtccacttt caaagacac ttctccctga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcactaaa ctcatcgcca ccaccactg</p> <p>ctgcataaac cctctcctgt atgcgtttct ttagtgagca tttagcaaat acctctgccg</p> <p>ctgtttccat ctgggtagta acaccccat tcaacccagg ggcagctctg caaaggcac</p> <p>atcgagggaa gaacctgacc attccaccca agtgtaact agcatccacc aatgcaaga</p> <p>agaataaaca tggattttca tctttctgca ttatttcagt taaattttct acacattgt</p> <p>atacaaaatc ggatacagga agaaaaggga gagtgagct aacatttgc aagcactgaa</p> <p>tttgtctcag gcacctgca aggtctttta caaagtgag ctctctgcgc toctaccact</p> <p>tgctccatagt tgggatagga ctagtctcat ttctctgaga agaaaactaa ggcgcgggaa</p> <p>tttgtctaaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgctcagagc ctacgcttgg tccagaacat caaactccaa acctgggga caaacgacat</p> <p>gaaataaatg tatttaaaa catct</p> <p>NP_003956.1 MANYTLAPED EYDLIEGEL ESDEAEQCQDK YDAQALSAQL VPSLCSAVFV IGVLNLLVV P</p> <p>LILVKYGLK RVENIYLLNL AVSNLCFLIT LPFWAHAGGD PMCKILIGLY FVGLYSETF</p> <p>NCLLTQVQRYL VFLLKGNFFS ARRRVPCGII TSVLAWVTAI LATLPEYVVY KPQMEDQKYK</p> <p>CAFSRTFFLP ADETFWKHFL TLKMNISVLV LPLFTFTFLY VQMRKTLRFR EQRYSLFKIV</p> <p>FAIMVVELIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGFFSKY LCRCFHLRSN TPLQPRGQSA QGTREPEPDH STEV</p> <p>atgcgagccc cgggcgcgct tctgcgcgc atgtcgcgc tactgtctct gctactgctc A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gccctgcgt ccagaaacga aacttgtctg</p> <p>ggggagagct gtgcacctac agtgatccag cgcgcggcca gggacgcctg gggaccggga</p> <p>aattctgcaa gagagcttct gcgagccoga gcaccaggg aggagcaggg ggcagcgttt</p> <p>cttcggggac cctcctggga cctgcggcg gccccgggc gtgacccgcg tcagggcaga</p> <p>ggggcgagag cgtcggcagc cggaccccc ggactccaa ccaggccacc tggcccttgg</p> <p>aggtggaaag gtgctcgggg tcaggagcct tctgaaactt tggggagagg gaacccacg</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NP_003956.1	<p>gaaataaatg tatttaaaa catct</p> <p>NP_003956.1 MANYTLAPED EYDLIEGEL ESDEAEQCQDK YDAQALSAQL VPSLCSAVFV IGVLNLLVV P</p> <p>LILVKYGLK RVENIYLLNL AVSNLCFLIT LPFWAHAGGD PMCKILIGLY FVGLYSETF</p> <p>NCLLTQVQRYL VFLLKGNFFS ARRRVPCGII TSVLAWVTAI LATLPEYVVY KPQMEDQKYK</p> <p>CAFSRTFFLP ADETFWKHFL TLKMNISVLV LPLFTFTFLY VQMRKTLRFR EQRYSLFKIV</p> <p>FAIMVVELIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGFFSKY LCRCFHLRSN TPLQPRGQSA QGTREPEPDH STEV</p> <p>atgcgagccc cgggcgcgct tctgcgcgc atgtcgcgc tactgtctct gctactgctc A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gccctgcgt ccagaaacga aacttgtctg</p> <p>ggggagagct gtgcacctac agtgatccag cgcgcggcca gggacgcctg gggaccggga</p> <p>aattctgcaa gagagcttct gcgagccoga gcaccaggg aggagcaggg ggcagcgttt</p> <p>cttcggggac cctcctggga cctgcggcg gccccgggc gtgacccgcg tcagggcaga</p> <p>ggggcgagag cgtcggcagc cggaccccc ggactccaa ccaggccacc tggcccttgg</p> <p>aggtggaaag gtgctcgggg tcaggagcct tctgaaactt tggggagagg gaacccacg</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cgggcgcgct tctgcgcgc atgtcgcgc tactgtctct gctactgctc A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gccctgcgt ccagaaacga aacttgtctg</p> <p>ggggagagct gtgcacctac agtgatccag cgcgcggcca gggacgcctg gggaccggga</p> <p>aattctgcaa gagagcttct gcgagccoga gcaccaggg aggagcaggg ggcagcgttt</p> <p>cttcggggac cctcctggga cctgcggcg gccccgggc gtgacccgcg tcagggcaga</p> <p>ggggcgagag cgtcggcagc cggaccccc ggactccaa ccaggccacc tggcccttgg</p> <p>aggtggaaag gtgctcgggg tcaggagcct tctgaaactt tggggagagg gaacccacg</p>	Homo sapiens



356	6446	Pael Receptor (GPR37)	NP_005293.1	<p>gcctccagc tcttccttca gatctcagag gaggaagaga aggggtccag aggcgctggc  atttcgggc gtagecagga gcagagtgtg aagacagtc cggagccag cgtatctttt  tactggccaa ggagagccgg gaaactccag ggttccacc aagacccct gtccaagacg  gccaatggac tggcggggca cgaagggtgg acaattgcac tcccgggccc ggcgctggcc  cagaatggat ccttgggtga aggaatccat gagcctgggg gtcccggccc gggaaacagc  acgaacccgg gtgtgagact gaagaacccc ttctaccgc tgaccaggga gtccatgga  gcctacccgg tcatgtgtct gtccgtgtgt atcttcggga ccggcatcat tggcaacctg  gcggtgatgt gcactgtgtg ccacaactac tacatggga gcatttccaa ctccctcttg  gccaacctgg ccttctggga ctttctcacc atcttctctt gccttcgctt ggtcatcttc  cacgagctga ccaagaagt gctgctggag gacttctctt gcaagatcgt gccctatata  gaggtcgctt ccttgggagt caccaccttc accttatgtg ctctgtgcat agaccgttc  cgtgctgcca ccaacgtaca gatgtactac gaaatgatcg aaaactgttc ctcaacaact  gccaaacttg ctgttatatg ggtgggagct ctattgttag cacttccaga agttgttctc  cgccagctga gcaaggagga ttgggggttt agtggccgag ctccggcaga aagtgcat  attaagatct cctctgattt accagacacc atctatgttc tagccctcac ctacgacagt  gcgagactgt tgggtgattt tggctgttac tttgtttgc ccagctttt caccatcacc  tgctctctag tgactgcgag gaaaatccgc aagcctgtac cggagggagt  aaacggcaga ttcaactaga gactcagatg aactgtacag tagtggcact gacctttta  tatggatttt gcattattcc tgaaaatata tgcaacattg ttactgccta catggctaca  gggggttcac agcagacaat ggacctcctt aatatcatca gccagttcct ttgttcttt  aagtcctgtg tcaacccagt cctccttttc tgtctgtgca aaccttcag tcgggccttc  atggagtgtc gctgctgttg ctgtgaggaa tgcattcaga agtcttcaac ggtgaccagt  gatgacaatg acaacgagta caccacggaa ctgcaactct cgcctttcag taccatacgc  cgtgaaatgt ccacttttgc ttctgtcga actcattgct ga</p>	Homo sapiens
357	6536	Putative Neurotransmi tter Receptor (PNR)	NM_003967	<p>atgagagctg tottcatcca aggtgctgaa gagecaccctg cggcattctg ctaccaggtg A  aatgggtctt gcccaggac agtatactat ctgggcatcc agttggctcat ctacctgacc  tgtgcagcag gcactgtgat tatcgtgcta gggaaatgtat ttgtggcatt tgcgtgtgcc  tacttcaag cgcttcacac gccaccaaac ttcctgtgc totcctggc cctggctgac  atgtttctgg gtctgtgtgt gctgcccctc ageaccattc gctcagtgga gagctgtgg  ttcttcgggg acttctctctg ccgctcgcac acctaccttg acacctctt ctgcctcacc</p>	Homo sapiens

358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> tccatcttcc atctctgttt catttccatt gaccgceact gtgcccactg tgacccccctg  ctctatccct ccaagttcac agtgagggtg gctctcaggt acatctctggc aggatggggg  gtgcccgcag catacacttc gttattcttc tacacagatg tggtagagac aaggctcagc  cagtggtcgg aagagatgcc ttgtgtgggc agttgceagc tgctgtctcaa taaattttgg  ggctgggttaa acttcccttt gttctttgct cctgtcctca ttatgatcag cttgtatgtg  aagatctttg tggttgctac cagacaggct cagcagatta ccacattgag caaaagcctg  gctggggctg ccaagcatga gagaaaagct gccaagacc tgggcattgt tggggcata  tacctcttgt gctggctgct cttcaccata gacagatgg tgcacagcct cettcacttt  atcacacccc cactgggtct tgacatcttt atctggtttg cttacttcaa ctcagcctgc  aaccocatca tctatgtctt ttctaccag tggtttcgga aggcactgaa actcacactg  agccagaagg tcttctcacc gcagacacgc actgttgatt tgtaccaaga atga  MRAVFIOGAE EHPAFCYQV NGSCPRTVHT LGIQLVLYLT CAAGMLIIVL GNVFAFAVS P  YFKALHTPTN FLLLSLALAD MELGLLVLP STIRSVESCW FFGDFLCRLH TYLDTLFLCLT  SIFHLCFISI DRHCAICDPL LYPKFTVRV ALRYILAGWG VPAAYTSLFL YTDVETRLS  QWLEEMPCVG SCQLLNKFW GWLNFPPLFFV PCLIMISLYV KIFVATRQA QQITTLKSLS  AGAAKHERKA AKTLGIWGI YLLCWLPTI DTMVDSLHFF ITPPLVFDIF IWFAYFNSAC  NPIIYFSYQ WFRKALKLTL SQKVFSPQTR TVDLYQE </p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p> cggcgcgatg cgcggagacc cccgcggggg cggcgggggc cgtgagcccc gatgaggccc A  gagcgtcccc ggcgcgcggg cagcgccecc ggcgcgatgg agacccccgc gtgggaccca  gcccgcgaacg actcgtctgc gccacgcgtg acccgcgcctg tgccccctca cgtgaagctt  ggcctcaccg tcgtctacac cgtgttctac gcgtgctct cgtgtttcat ctacgtgcag  ctctggctgg tctgcgtta cgcacacaag cggctcagct accagagcgt cttcctcttt  ctctgcctct tctggcctc cctgcggacc gtctctctct cctctactt caaagacttc  gtggcgcca attcgtctcag cccctctgtc tctggtctgc tctactgctt cctgtgtgc  ctgcagtttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat tttcaagcc  aagtcaaaat attctocaga attactcaaa taccggttg cctctacct ggcctccctc  ttcatcagcc ttgttttctt gttggtgaat ttaacctgtg ctgtgctggt aaagacggga  aattgggaga ggaagttat cgtctctgtg cgagtggcca ttaatgacac gctctctgtg  ctgtgtgccg tctctcttc catctgtctc taaaaatct ctaagatgct cttagccaac  atttacttgg agtccaaagg ctcctcctg tgcacagtga ctgccatcg tgtaaccgtg  atactgcttt acactctcg ggcctgctac aacctgttca tctgtctatt tttcagaac  aagagcgtcc attcctttga ttatgactgg tacaatgtat cagaccaggc agatttgaag  aatcagctgg gatgctgg atactatta ttggagtggt tgtatttgt ttgggaactc  ttacctacca ccttagtctg ttattcttc cgagttagaa atctacaaa ggaccttacc  aacctggaa tggccccag ccatggattc agtccagat cttatttctt tgacaacct  cgaagatatg acagtatga tgaccttgc tggacatttg cccctcaggg acttcaggga  ggttttgctc cagattacta tgattgggga caacaacta acagcttctt ggcacaagca  ggaactttgc aagactcaac ttggatcct gacaaaccaa gccttgggta gcatcagtta  acagttttat ggaagattcc tcagatgaaa agcttcagaa aagcatagt acagctgaat  ttttagggca ctttccctta agaaatagaa cttgattttt attgtttaca ggtttccaat  ggccccatag gaataagcaa taatgtagac tgataaaccc ttattttagt actaaagagg </p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	ctctctgct atgttcac MRPERPRRG SAPGPMETPP YVQLWLRLY RHKRLSYQSV PVCLOFFTLT LMNLYFTQVI KTGNWERKVI VSVRVAINDT LFLCAVLSL ICLYKISKMS LANIYLESKG SSVCOVTAIG VTVILLYTSR ACYNLFILSF SONKSVHSFD YDMYNVSDQA DLKNQLGDAG YVLFGWVLFV WELLPTTLV YFFRVNPTK DLTNPGMVPS HGFSPRSYFF DNPRRYDSDD DLAWNIAPOG LQGGFAPDYY DWGQQTNSFL AQAGTLQDST LDPDKPSLG	WDPARNDSLP PTLTPAVPPY VKIGLTVVYT VFYALLFVFI P LRTVLFSEFYF KDFVAANSL PFVFWLLYCF FKAKSKYPE LKRYRLPLYL ASLFI SLVFL LWNLTCAVLV LFVLCVLSL ICLYKISKMS LANIYLESKG SSVCOVTAIG YDMYNVSDQA DLKNQLGDAG YVLFGWVLFV HGFSPRSYFF DNPRRYDSDD DLAWNIAPOG	Homo sapiens
361	6853	Purinergic Receptor P2Y11	NM_002566	atggatcgag gtgccaagtc ctgcccctgcc aacttcttgg cagctgcccga cgacaaactc A agtgggttcc agggggactt cctgtggccc atactggtgg ttgagttcct ggtggcctgt gccagcaatg gccctggcct gtaccgttc agcatccga agcagcgcct atggcacccc gcctgtgtct tctctgtcca gctggcagtc agcagactgc tctgcgtctt gacgtgccc ccgctggcgc cctacctata tcccccaag cactggcgt atggggaggc cgctgcccgc ctggagcgtt tctcttcc ctgcaacctg ctgggcagcg tcatcttcat cactgcatc agcctcaacc gctacctggg catcgtgcac ccttcttcg ccgaagcca cctgcgaccc aagcacgcct gggcctgag cgtgcgcgc tgggtcctgg ccgcctctgt ggcctgccc acactcagct tctccacct gaagaggcgc cagcaggggg cgggcaactg cagcgtggcc aggcccgagg cctgcataca gtgtctgggg acagcagacc acgggctggc ggcctacaga gcgtatagcc tgggtctggc ggggttggc tgcggcctgc cgtgctgtct cactgtggca gcctacggcg cctcggcg ggcctgtcta cgcagccag gcatgactgt ggcgagaag ctgctgtgg cagcgttgg ggccagtgg gtggccctct acgcagctc ctatgtccc taccacatca tgcgggtgct caactggat gctcggcgc gctggagcac ccgctgccc agctttgcag acatagccca ggccacaga gccctggagc tggggcccta cgtgggctac caggtgatgc ggggcctcat gccctggcc ttctgtgtcc acccttact ctacatggcc gcagtgccca gctgggctg ctgctgccga cactgcccgc gctacagga cagctggaac ccaagaggac ccaagagcac tggccaagcc ctgcccctca atgccacagc cgcccctaaa ccgtcagagc cccagctccg tgagctgagc caatga	cgactgcccga cagctgcccga atgccacagc atgccacagc cgactgcccga cg	

363	6921	G Protein- Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEPQSRELS Q atggcttcaac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccagagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gctttctggg gaacagcgc accattcggg tcaccaggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttgcttg ctgggacac ttggtgttcc tcatcgcat gcccatggag ttctacagca tcatctgaa tccctgacc acgtccagct acacctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gtacagctgc tgcagtgct gacactcagc tttagagctt acatcgccat ctgtcacccc ttcaggtaca aggtgtgtc gggaccttg caggtgaagc tgctgattg ctctgcttg gtcacctccg ccttggtggc actgacctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaacgct ccagcacccg ccaccacag cagcccgaga cctcaatat gtccatctgt accaactct ccagccgtg gaccgtgtc cagtcacaga tcttcgggc cttcgtgtc tacctgtgg tctgtcttc cgtagcctc atgtgctgga acatgatga ggtgctcatg aaagccaga agggctcgt gccgggggc acggggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccg caggaggcag accatcatct tcttgaggt gattgtgtg acattggccg tatgtggtat gcccaaccg attcggagga tcatggctg gcccaacc ccagcagct gaacaggtc ctacttcgg gcgtacatga tctctctcc cttctcggag acgttttct acctcagctc ggtcatcaac ccgtctctgt acaggtgtc ctgcagcag ttctggcggg tgttcgtgca ggtcgtgtc tgccgctgt cgtgcagca gcccaaccac gagaagcgc tgcgcgtaca tgcgactcc accacgcaca ggcggcgtt tgtgcagcgc cgtgtgctt tgcgtccc gcgccagtc tctgcaagga gaactgaga gattttctta agcactttc agagcagggc cgagcccg tctaagtcac agtcattgag tctcagagca cttagagcca actcagcgc gaaaccagcc aattctgtc cagagaatg ttttcagag catgaagtt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLIIVYLII FMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGNPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHLVLTLS FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNNMIC TNLSSRWTFV QSSIFGAFV YLVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPOLRKSE SEESRTARRQ TIIFRLIV TLAVCMWPNQ IRRIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEFPQ SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV ggacaggtgc cccgggagct tcccgctgc gaagaccag acggctgag gagccgggc A agcctcggg tcagcggcac catgaacgtc tgggctgcc caggggcgg gagcggagc caggcggg cgggggaggg ctggcacc caggcggta cgtgcccc gctctcgcg ctcatcttc cgtgggac cgtgggcaac acgtgtgc tggcggtgt gctggcggc ggccaggcg tcagcactac caactgttc atcctaac tggcggtggc cgactgtgt ttcatcctgt gctcgtgccc cttccaggg accatata cctggagcgg ctgggtgtc ggctcgtgc tgtgcaagg ggtgacttc ctcatcttc tcaccatga cggcagcagc ttcagctgg ccgctgtc cctggacag tatctggca tccgctacc cgtgactcc	Homo sapiens
364	6921	G Protein- Coupled Receptor GPR39	NP_001499.1	atggcttcaac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccagagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gctttctggg gaacagcgc accattcggg tcaccaggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttgcttg ctgggacac ttggtgttcc tcatcgcat gcccatggag ttctacagca tcatctgaa tccctgacc acgtccagct acacctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gtacagctgc tgcagtgct gacactcagc tttagagctt acatcgccat ctgtcacccc ttcaggtaca aggtgtgtc gggaccttg caggtgaagc tgctgattg ctctgcttg gtcacctccg ccttggtggc actgacctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaacgct ccagcacccg ccaccacag cagcccgaga cctcaatat gtccatctgt accaactct ccagccgtg gaccgtgtc cagtcacaga tcttcgggc cttcgtgtc tacctgtgg tctgtcttc cgtagcctc atgtgctgga acatgatga ggtgctcatg aaagccaga agggctcgt gccgggggc acggggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccg caggaggcag accatcatct tcttgaggt gattgtgtg acattggccg tatgtggtat gcccaaccg attcggagga tcatggctg gcccaacc ccagcagct gaacaggtc ctacttcgg gcgtacatga tctctctcc cttctcggag acgttttct acctcagctc ggtcatcaac ccgtctctgt acaggtgtc ctgcagcag ttctggcggg tgttcgtgca ggtcgtgtc tgccgctgt cgtgcagca gcccaaccac gagaagcgc tgcgcgtaca tgcgactcc accacgcaca ggcggcgtt tgtgcagcgc cgtgtgctt tgcgtccc gcgccagtc tctgcaagga gaactgaga gattttctta agcactttc agagcagggc cgagcccg tctaagtcac agtcattgag tctcagagca cttagagcca actcagcgc gaaaccagcc aattctgtc cagagaatg ttttcagag catgaagtt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLIIVYLII FMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGNPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHLVLTLS FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNNMIC TNLSSRWTFV QSSIFGAFV YLVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPOLRKSE SEESRTARRQ TIIFRLIV TLAVCMWPNQ IRRIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEFPQ SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV ggacaggtgc cccgggagct tcccgctgc gaagaccag acggctgag gagccgggc A agcctcggg tcagcggcac catgaacgtc tgggctgcc caggggcgg gagcggagc caggcggg cgggggaggg ctggcacc caggcggta cgtgcccc gctctcgcg ctcatcttc cgtgggac cgtgggcaac acgtgtgc tggcggtgt gctggcggc ggccaggcg tcagcactac caactgttc atcctaac tggcggtggc cgactgtgt ttcatcctgt gctcgtgccc cttccaggg accatata cctggagcgg ctgggtgtc ggctcgtgc tgtgcaagg ggtgacttc ctcatcttc tcaccatga cggcagcagc ttcagctgg ccgctgtc cctggacag tatctggca tccgctacc cgtgactcc	Homo sapiens
365	7221	Galanin Receptor GalR2	NM_003857	atggcttcaac ccagctctccc gggcagtgac tgctcccaaa tcattgatca cagtcagtgc A cccagagtttg aggtggccac ctggatcaaa atcacccctta ttctggtgta cctgatcatc ttcgtgatgg gctttctggg gaacagcgc accattcggg tcaccaggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttgcttg ctgggacac ttggtgttcc tcatcgcat gcccatggag ttctacagca tcatctgaa tccctgacc acgtccagct acacctgtc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gtacagctgc tgcagtgct gacactcagc tttagagctt acatcgccat ctgtcacccc ttcaggtaca aggtgtgtc gggaccttg caggtgaagc tgctgattg ctctgcttg gtcacctccg ccttggtggc actgacctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaacgct ccagcacccg ccaccacag cagcccgaga cctcaatat gtccatctgt accaactct ccagccgtg gaccgtgtc cagtcacaga tcttcgggc cttcgtgtc tacctgtgg tctgtcttc cgtagcctc atgtgctgga acatgatga ggtgctcatg aaagccaga agggctcgt gccgggggc acggggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccg caggaggcag accatcatct tcttgaggt gattgtgtg acattggccg tatgtggtat gcccaaccg attcggagga tcatggctg gcccaacc ccagcagct gaacaggtc ctacttcgg gcgtacatga tctctctcc cttctcggag acgttttct acctcagctc ggtcatcaac ccgtctctgt acaggtgtc ctgcagcag ttctggcggg tgttcgtgca ggtcgtgtc tgccgctgt cgtgcagca gcccaaccac gagaagcgc tgcgcgtaca tgcgactcc accacgcaca ggcggcgtt tgtgcagcgc cgtgtgctt tgcgtccc gcgccagtc tctgcaagga gaactgaga gattttctta agcactttc agagcagggc cgagcccg tctaagtcac agtcattgag tctcagagca cttagagcca actcagcgc gaaaccagcc aattctgtc cagagaatg ttttcagag catgaagtt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLIIVYLII FMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGNPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHLVLTLS FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNNMIC TNLSSRWTFV QSSIFGAFV YLVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPOLRKSE SEESRTARRQ TIIFRLIV TLAVCMWPNQ IRRIMAAKP KHDWTRSYFR AYMLLPFSE TFFYLSSVIN PLYTVSSQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLFASRRQS SARTEKIFL STFQSEAEFPQ SKSQSLSLES LEPNSGAKPA NSAAENGFOE HEV ggacaggtgc cccgggagct tcccgctgc gaagaccag acggctgag gagccgggc A agcctcggg tcagcggcac catgaacgtc tgggctgcc caggggcgg gagcggagc caggcggg cgggggaggg ctggcacc caggcggta cgtgcccc gctctcgcg ctcatcttc cgtgggac cgtgggcaac acgtgtgc tggcggtgt gctggcggc ggccaggcg tcagcactac caactgttc atcctaac tggcggtggc cgactgtgt ttcatcctgt gctcgtgccc cttccaggg accatata cctggagcgg ctgggtgtc ggctcgtgc tgtgcaagg ggtgacttc ctcatcttc tcaccatga cggcagcagc ttcagctgg ccgctgtc cctggacag tatctggca tccgctacc cgtgactcc	Homo sapiens

366	7221	Galanin Receptor GalR2	NP_003848.1	<p>cgcgagctgc gcacgcctcg aaacgcgctg gcagccatcg ggctcatctg ggggctgtcg  ctgtcttct cgggccccta cctgagctac taccgceagt cgcagctggc caacctgacc  gtgtgccatc ccgcgtggag cgcacctcgc cgcgcgcga tggacatctg cacttctgtc  ttcagtaacc tgttctctgt gctggttctc ggctgacct acgcgcgcac cttgcgctac  ctctggcgcg ccgtgacccc ggtggccgcg ggtctgggtg ccggcgcgcg caagcgcaag  gtgacacgca tgatctctcat cgtggccgcg ctctctgcgc tctgctggat gcccaccac  gcgtcatcc tctggtgtg gttcgccag ttcccgctca cgcgcgccac ttatgcgctt  cgcctctct cgcacctggt ctctacgccc aactctcgc tcaaccccat cgtttacgcg  ctggtctcca agcaattccg caaaggcttc cgcacgatct gcgcgggccc gctgggcccgt  gccccaggcc gagctcggg ccgtgtgtgc gctgcgcgc gggcgaccca cagtggcagc  gtgttgagc gcgagtcacg cgaactgttg cacatgacg aggcggcggg ggccttctgt  ccctgcccc gcgcttccca gccatgcatc ctgcagccct gtcctggccc gtcctggcag  ggcccaagg caggcgacag catcctgacg gttgatgtg cctgaaagca cttagcgggc  gcgtgggat gtcacagagt tggagtcatt gttgggggac cgtgggcccg</p>	Homo sapiens
				<p>LRGGQAVSTT P  NLFILNLGVA DLFCILCCVP FQATYITLDG WVFGLSLCKA VHFILFLTMH ASSFTLAAYS  LDRLAIRYP LHSRELTPR NALAAIGLIW GLSLFSGPY LSYRQSOLA NLTVCHPAWS  APRRRAMDIC TFVFSYLLPV LVGLTYART LRYLWRADV VAAAGSGARRA KRKVTRMILI  VAALFCICWM PHHALILCW FQGFPLTRAT YALRILSHLV SYANSCVNPI VYALVSKHFR  KGERTICAGL LGRAPGRASG RVCAARGTH SGSVLRESS DLLHMSEAAG AIRPCPGASQ  PCILEPCPGP SWQGPKAGDS ILTVDA</p>	
367	7246	Orexin Receptor 1	NM_001525	<p>cctccctca ggaagtttga ggctgagacc cgaaagacc tgggtgcaag cctccaggca A  ccctgaaggg agtgggctga gggctggccc agctccctc ctctccctct gttagagccta  ggatgcccc ctgctgcgc ggtcctgag ctcattgagc cctcagccac ccaggggccc  cagatggggg tcccccttg cagcagagag ccgtccccctg tgcctccaga ctatgaagat  gagttctcc gctatctgt gctgattat ctgtacccaa aacagatga gtgggtcctc  atcgagcct atgtggtgt gttcgtctg gccctgggtg gcaacacgct ggtctgcctg  gccgtgtggc ggaaccacca catgaggaca gtcaccaact acttcattgt caacctgtcc  ctggctgacg ttctggtgac tgctatctgc ctgcccggcca gctgctggt ggacatcact  gagtcctggc tgttcggcca tgccctctgc aaggtcatcc cctatctaca ggtgtgttcc  gtgtcagtg cagtgtctaac tctcagcttc atcgccctg cccgctggta tgcctatgc  caccactat tgttcaagag cacagcccgg cggggcccgtg gctccatcct gggcatctgg  gctgtgtcgc tggccatcat ggtgcccag gctgcagta tggaaatggag cagtgtgtgtg  cctgagctag ccaaccgcac acggtcttc tcagtctgtg atgaacgtg ggcagatgac  ctctatccca agatctacca cagtgtcttc ttattgtca cctacctggc cccactgggc  ctcatggcca tggcctattt ccagatattc cgcagctct gggccgcca gatccccggc  accacctcag cactggtgog gaactggaag cgcacctcag accagctggg gacactggag  cagggcctga gtggagagcc ccagccccg ggcgcgcct tcctggctga agtgaagcag  atgcgtgcac ggaggagagc agccaagatg ctgatggtg tctgctggt cctgcctc  tgtacctgc ccatcagcgt cctcaatgct cttaaagagg tgttcgggat gttccgcaa  gccagtgacc gcgaagctgt ctacgcctgc ttcaccttct cccactggt ggtgtacgccc</p>	Homo sapiens

368	7246	Orexin Receptor 1	NP_001516.1	MEPSTAPGAQ MGVPFGSREP SPVPDPYDEE FLRYLWRDYL YPKQYEWVLI AAYVAVFWA P LVGNTIVCLA VWRNHMRTV TNYFIWNLSL ADVLVTALCL PASLLVDITE SWLFHALCK VIPYLQAVSV SVAVLTLSFI ALDRWYAICH PLLFKSTARR ARGSIILGIWA VSLAIMVPOA AWMECSSVLP ELANRTRLFS VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLWGRQIPGT TSALVRNWKR PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML MVLLVFALC YLPISVLNLV KRVEGMFRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFRQEFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVLTSTV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct teagctgagc cggagctgagc ttctctctcc tgggtgctatt A gctgcagcct ccagtgccgg gtcctagatt cctcagctgc ctatcttccc ggtgcaacat cgcctgtaaa gacagcaaa gacccgcaga agtgcccgagg cagaagactc cggagggcatt ggctcagtaa cttttcacgt cattttctgc tcgggagccc cttctagcct ctcgcgcag cctttccca cgaatacac cagtgtcat ggggcaggcg gagagagctc tgcagcattg agcggaacgg gacttgagcc cgtgatgtcc ggcacacaaat tggagagactc ccccccttgt cgcaactggt catctgcttc ggagctgaat gaaactcaag agcccttttt aaaccccccc gactatgacg acgaggaatt cctgcggtac ctgtggaggg aatacctgca ccgaaagaa tatgagtggg tcctgatcgc cgggtacatc atcgtgttcg tcgtggctct cattgggaac gtcctggttt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactactc atagtcaatc tttctctggc tgatgtgctc gtgaccatca cctgccttcc agccacactg gtcgtgggata tcaactgagac ctgggttttt ggacagctccc ttgcaaaagt gattccttat ctacagacgg tgcggtgtc tgtgtctgtc ctacacactga gctgtatcgc cttggatcgg tggatgcaa tctgtcacc tttgatgttt aagagcagag caaagcgggc cgttaacagc attgtcatca tctgattgt ctcctgcatt ataattgttc ctcaggccat cgtcatggag tgcagcacgg tgttcccaagg cttagccaat aaaaacaccc tctttacggt gtgtgatgag cgctgggggt gtgaaattta tcccaagatg taccacatct gtttctttct ggtgacatac atggcacccac tgtgtctcat ggtgttggtt tatctgcaaa tatttcgcaa actctggtgt cgacagatcc ctggaacatc atctgtagtt cagagaaaat ggaagccccct gcagcctgtt tcacagcctc gagggccagg acagccaacg agtcccgga tgaagcgtgt ggcggctgaa ataaagcaga tccgagccag aggaaaaaca gcccgatgt tgatggttgt gcttttggtg tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttgggatg tttgcccata ctgaagacag agagactgtg tatgcctggt ttaccttttc acactggctt gtatatgcca atagtgtgc gaatccaatt atttataatt ttctcagtg aaaatttcga gaggaattta aagctgcgtt ttcttgctgt tgccttgag ttaccatcg ccaggaggat cggtcacca ggggacgaac tagcacagag agccggaagt ccttgaccac tcaaatcagc	Homo sapiens

370	7247	Orexin Receptor 2	NP_001517.1	<p> aactttgata acatatcaaa actttctgag caagtgtgc tcactagcat aagcacactc  ccagcagcca atggagcagg accactcaa aactggtaga atattattc atatgacaag  gataacctgag taaaactatc ctttttaaaa tcactgggaa cagaaaatctt attatcctat  gatgtgaagc taaaattact tgtggatctt tttttttttt aatctattgc tctttggaaa  taaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaaaaaa  MSCTKLEDSF PCRNWSSASE INETQEPFLN PTYDDEEFL RYLWREYLHP KEYEWLIAG P  YIIVFVALI GNVLVCAVM KNHMRVTN YFIVNLSLAD VLVTITCLPA TLVVDITETW  FFQSLSCKVI PYLOTVSVS SVLTLSIAL DRWAICHPL KMYHICFFLV TYNAPLCMLV  CIIMPQAIV MECSTVFPGL ANKTLFTVC DERWGGEIYP PVSQPRGPQ PTKSRMSAVA AEIKQIRARR  LAYLQIFRKL WCRQIPGTSS VVQRWKPLQ VVQRLKRVF GMFAHTEDRE TVYAWTFESH WLIVYANSAAN  KTARMLMVV LVFAICYLPI SILNVLKRVF CCLGVHHRQ EDRLTRGRTS TESRKSLLTQ ISNFDNISKL  PIYNFLSGK FREEFKAAFS CCCLGVHHRQ  SEQVLTIS TLPANGAGP LQNW </p>	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	<p> ccagctgata ttccagccca cagcaatgga gccacatgac tcctccaca tggactctga A  gttccgatac actctcttc cgattgtta cagcatcatc ttgtgctcg ggtcattgc  taatggctac gtgctgtggg tctttgcccg cctgtaccct tgcaagaaat tcaatgagat  aaagatcttc atggtgaacc tcaccatgac ggacatgctc ttcttgatca cctgccact  ttggattgac tactaccaaa accagggcaa ctggatactc cccaaattcc tgtgcaactg  ggctggctgc cttttcttca tcaacacctg taactcgcc catcaagat gctcaggcca acaccgcaa  ttataaccgc ttccaggcag taactcgcc ggtggccatt gtggagctg catctactt  gcgtggcacc tctttgctc tggctatctg ggtggccatt ggtcaggcca acgtcactcg  cctcatcctg gactctacca acacagtgc gccagtcctc atcatcaca tctcactg  ctgctttgag cattacgaga agggcagcgt gccagtcctc atcatcaca tctcactg  gttcagcttc ttctggtct tctcactat cctctctgc aacctggtca tcactcgtac  cttgctcatg cagccgtgc agcagcagc caacgctgaa gtcaagcgc gggcgtgtg  gatgggtgc acggtcttg cgtgttcat catctgctc gtgcccacc acgtgtgca  gctgccctgg accctgctg agctgggctt ccaggacagc aaattccacc aggcattaa  tgatgacat caggtcaccc tctgctcct tagcaccac tgtgtcttag acctgttat  ctactgttc ctaccaaga agttccgcaa gcacctcacc gaaaagtctt acagcatgcg  cagtagccgg aatgctccc gggccaccac ggatacgtc actgaagtgg ttgtgccatt  caaccagatc cctggcaatt cctcaaaa ttagtctctg cttc  MEPHDSSHND SEFRYLFPI VYSIIFLVG IANGYVLWVF ARLYPCKKN EIKIFMNL P  MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT  RPIKTAQANT RKRGISLSV IWAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYKQ  SVPVLIIHIF IVFSFLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LWMVCTVLAV  FIICFVPHHV VOLPWTIAEL GFQDSKFHOA INDAHQVTLIC LLSTNCVLDL VIYCFLLTKKE  RKHLTEFYS MRSSRKCSRA TTDVTVEVV PFNQIPGNLS KN </p>	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	<p> caaccagatc cctggcaatt cctcaaaa ttagtctctg cttc  MEPHDSSHND SEFRYLFPI VYSIIFLVG IANGYVLWVF ARLYPCKKN EIKIFMNL P  MADMLFLITL PLWIVYQNG GNWILPKFLC NVAGCLFFIN TYCSVAFLGV ITYNRFQAVT  RPIKTAQANT RKRGISLSV IWAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYKQ  SVPVLIIHIF IVFSFLVFL IILFCNLVII RTLLMQPVQO QRNAEVKRRR LWMVCTVLAV  FIICFVPHHV VOLPWTIAEL GFQDSKFHOA INDAHQVTLIC LLSTNCVLDL VIYCFLLTKKE  RKHLTEFYS MRSSRKCSRA TTDVTVEVV PFNQIPGNLS KN </p>	Homo sapiens
373	8509	G Protein- Coupled Receptor Ls8509	NM_007223	<p> tggggggcgtc taactcgtc ccgcccgcg tgtcaagctg tgttctagcg gccgaggac A  cgaggggggc taagaaggg ggcgccagc catgcagagg caaaaaggcg ctgcggaacg  gggtcccccgt cgccagtctt gaggcaggag gtcggagcca caagtgggg gctgggaagc  aggaccagc acggcgctct tggcaggcgg ccggggcgag gccaggctg ctggggagcg </p>	Homo sapiens

tcaggggcttt ccaccaagc catgggagct gtgaggcact cgggggtccc ctctgggctc  
cggccactcg gcgtgggcat tacgttggct tcacatcgcc atccagcctc gaagccaaca  
ggactgaaaa atagcttcgg ccaacgttc tctcccgct aaggagaggg gtctagtgcg  
tcagcccag gggactggag aggatgccc tagccctcga gggcgaggag acccgcggtt  
gaaggaggca gcgggagcgg agagcgccct ccttgaccat cgaatgcctc cttctgtgtt  
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ggcatggggc gcagcgcgc ctcctccct cccgcctcc cggcgccgg ggttggcgat  
gtggagacgt gaggggaccc gtccgctgct cggctcttc caggactccg ccaggcgccc  
gcgcgtccct cctcacccg aggagggag gctccgcgg gggctccgag gcggcgggcg  
cgcgagccg ggtccacgc ctcgccatgg gacataacgg gactggagc tctccaaatg  
ccagcgagcc gcacaacgcg tccggcgccg aggtcgggg tgtgaaccgc agcgcgctcg  
gggagttcgg cgaggcgag ctgtaccgc agttcaccc caccgtgcag gtctcatct  
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tcaaatctgt caccacaggt ttcattaaaa acctggcctg ctcggggatt tgtgccagcc  
tggctctgtt gcccttcgac atcattcctca gcaccagtc tcactgttgc tgtggatct  
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tctctattcc ctatgctcc cagcgggag cagagctgca cgcacccctg ctctccatgg  
tgatggctct catcttgtgt agcgtgccc atgccacct ggtcgtctac cagactgtgc  
tcaatgtccc tgacacttcc gtcttcttgc tgtcactgc tgttggctg ccaaaagtct  
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agaagcggct gcttccccc ttgggcaaca cccagaaga gctgatccag acaagggtgc  
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accagagtgt ggggaatgctg tggccatgtg attgtatgat ctcttgcaa ctcagtgta  
gttgattcct ccaatatggg ccagatgctt ttgaatgata gggaatcta cataaatcc  
agtgtcctct ttattgagg agtatatgta tccatctcag tgatccatgt ccttagtgaa  
gtccacatta ttctctgtg ggacaagagc tgggcaagttt tgaatgggtc ttgaggtggg



374	8509	G Protein- Coupled Receptor Ls8509	NP_009154.1	<p>           taccatgt gcactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag            agagaagact ttcagagctc acagagcag 99agcaggag cactctaagg gaattc            MGHNGSWISP NASEPHNASG AEAGVNRSA LGEFGEAQLY RQFTTTVQVV IFIGSLIGNF P            MVLWSTCRIT VFKSVNRFI KNLACSGICA SILVCPFDII LSTSPHCCWV IYTNLFCKVV            KFLHKVFCVS TILSPALAL DRYYSVLVPL ERKISDAKSR ELVMIWAHA VVASVPVFAV            TNVADIYATS TCTEWSNSL GHLVYVLVYN ITTVIPVVV VFLELILIRR ALSASQKKKV            IIAALRTPQN TISIPYASQR EAEHLATLLS MMVFIILCSV PYATLVVYQT VLNVPDTSVF            LLLTAVWLPK VSLLANPVLF LTVNKSVRKC LIGTLVQLHH RYSRRNVVST GSGMAEASLE            PSIRSGSQLL EMFHIGOOOI FKPTDEDEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP            SAPPLSTVDS VSQVAPAAPV EPETFPDKYS IQFGFGPFEL PPQWLSETRN SKKRLLPPLG            NTPHEELIQTK VPKVGRVERK MSRNKVSIF PKVDS         </p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p>           ttgataggga tagaacaaca ttgtgctgct tctatagtta acaagatgct gttacattcc A            ttgcctcact agctctgaag actatactag cgggacaaaag aaagcacctg agatgagctg            agaggagggt aaaggtacac agagatcccc tggatatattg tctatgtcc tctcaggggc            ttgtctacca ctagagaatt atccatatta agaacttgca ttgatattct gggttctgtt            tcatttttta ggggtctcaag agcacgctca agtcattcac atgtttccat caaatacaga            cacagatcag ggaagattaa accctactaa ttctctgctg gatgcctcac acaagggtgc            cttccaagaa ctaatggcca aaatatccac ccacaacaca aataagctta gaaaatctct            tcttacaatc ctgacacaaat ggaagtttcc ctacaacacc cagcatctaa tacaaccagc            acaaagaaca acaactcggc atttttttac tttagtctct gtcacacctc tctccagct            ttactoctat tatgcatagc ctatactgtg gtcttaattg tgggcttttt tggaaacctc            tctctcatca tcatcatctt taagaagcag agaaaagctc agaatctac cagcatactg            attggccaatc tctccctctc tgataccttg gtgtgtgtca tgtgcatcca ttttactatc            atctacactc tgatggacca ctggatattt ggggatacca tgtgcagact cacatcctat            gtgcagagtg tctcaatctc tgtgtccata ttctcacttg tattcactgc tgtcgaaaga            tatcagctaa ttgtgaaccc ccgtggctgg aagcccagtg tgactcatgc ctactggggc            atcacactga ttgtgctgtt tccctctctg ctgtctattc ccttcttctt gtcctaccac            ctcaactgat agcccttccg caacctctct cctccactg acctctacac ccaccagggtg            gcctgtgtgg agaactggcc ctccaaaaag gaccggctgc tcttcaccac ctccctttt            ctgtgcagt attttgttcc tctaggcttc atctcatct gctacttgaa gattgttatc            tgcctccgca ggagaaatgc aaaggtagat aagagaaggg aaaatgaggg ccggctcaat            gagaacaaga ggaatcaaac aatgttgatt tccatctggg tgaccttggg agcctgctgg            ctgccccgaa tatcttcaat gtcacttttg actgggtatca tgagggtgctg atgagctgcc            accacgacct ggtatttcta gtttgcact tggttgctat ggtttccaca tgtataaacc            ctctctttta tggcttctc acaaaaaatt tccaaaaagg cctggtagtg cttattcacc            actgctgggtg cttcacacct caggaagat gtgaaaaat tgccatctcc actatgcaca            cagactccaa gaggtcttta agattggctc gtataaacac aggtatatga aaattgataa            tgcctgaagct cttcttgaat gggagctgga caggtaatgg tgggaatagg gcaagatgca            gaaagaagaa accagaacca aaaaatgcaa cttataccc acttttctt taggctaaga            ctgctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc            cctttctct taagaaaaata actctaataa ttcaaacac ctgccccgca tcatgtgtg         </p>	Homo sapiens

376	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NP_006164.1	mevslnhpas nttstknns affyfesqcp pspallllci aytvvlivgl fgnlslllil P fkqkrkagnf tsilianlsl sdtlvcvmci hftiiytimd hwifgdtmcr ltsyvvqsvsi svsifslvft averyqlivn prgwksvth aywgitiwl fslilsipff lsyhltdepf rnlspltdly thqvacvwn pskkdrllft tsflflgyfv plgfilicyl kiviclrrrn akvdkkkne grlnenkrin tmlisivtf gacwlpriiss msslgtimrc	Homo sapiens
377	9421	Neuropeptide Y Receptor Type 1	nm_000909	caagaatga gaatgagaaa gcagagagag agggcaaacag cagtgtggc tggggaacaa tgttcacaga tacttttatt caatggaata tctacaaaag ttatgactaa tgatgtgctt agtaaaaaa ctgctatacc tccttagcac tgagaat cattcccacc ctctctctt taataagcag gaggcaaaaa gacaaattcc aaagaggatt A gttcagttca agggatgaa gaattcagaa taatttgggt aaatggattc caatatacggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctaaa ataatctata acaacaaac caatcaaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactotaatt tctcagagaa gaatgcccag ctctggctt ttgaaaatga tgattgtcat ctgcccctgg ccatgatatt taccttagct ctgtgttatg gagctgtgat cattcttggt gtctctggaa acctggcctt gatacatac atcttgaac aaaaggagat gagaaatggt accaacatcc tgattgtgaa cctttccctc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac ataatggac cactgggtct ttggtgaggc gatgtgtaag ttgaatcctt ttgtgcaatg tgttcaatc actgtgtcca ttctctctc ggttctcatt gctgtggaac gacatcagct gataatcaac cctggagggt ggagacacaa taatagacat gcttatgtag gtattgctgt gatttgggtc ctgtctgtgg ctctctctt gcctttcctg atctaccaag taatgactga tgagccgttc caaatgtaa cacttgatgc gtacaaagac aaatacgtgt gctttgatca atttccatcg gactctcata ggttgtctta taccactctc ctcttggtgc tgcagtattt tgggtcaact tgtttatat ttatttgcta cttcaagata tatatacgcc taaaaaggag aaacaacatg atggacaaga tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgcagtc tgcgtggctcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaacc acaatctgtt attcctgctc tgcacacctc cagcaatgat atccattgt gtcaacccca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctggggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg aagcaagcaa gccagtcgc atttaaaaa atcaacaaca atgatgataa tgaaaaaatc tgaactact tatagcctat ggtcccgat gacatctgt taaaaacaag cacaactgc aacatacttt gattacctg tctcccaagg aatgggggtg aaatcattg aaaaacttcc agattttctt gtctgtctt ttactgcttt tgtgttagtt gtcataatta catttgaac aaaaggtgtg ggtttgggg tcttctggaa atagtittga ccagacatct ttgaagtgtc ttgttgaat ttatgcata aatataaaga cttttatct gtacttattg gaatgaaatt tctttaaagt attacgatgc gtgacttca gaagtacctg ccataccaata cgggtcattag attgggtcat cttgattaga ttagattaga tttagattgtc aacagattgg gccatcctta ctttatgata ggcattcatt tagtgtgta caatagtaac agtatgcaaa agcagcattc aggagccgaa agatagtctt gaagtcattc agaagtgggt tgaggtttct gtttttgggt ggtttttgtt tgttttttt ttttttcacc ttaaggaggagg ctttcatttc ctcccgactg attgtcactt aaatcaaaat	Homo sapiens

Homo  
sapiens

378 9421 Neurotrophin NP\_000900.1  
Y Receptor  
Type 1

ttaaaaatga ataaaaagac atatttctca gctgcaataa ttatggagaa ttgggcaccc  
acaggaatga agagagaaag cagctcccca acttcaaaa cattttgga ctgacaaca  
agagcatttt agagtaatta atttaataaa gtaaatagat attgctgcaa atagtaaat  
tatatttatt tgaattgatg gtaagagat ttccatttt tttaacagac tttcagtg  
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acaaatagct ttttccatac agcagtgcct atatagtac gatatttaac ttcaaatgc  
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aaactatatt ttaagaaca agacatact caatgtatta tacagataaa gtattacatg  
tgtttgatt taaaaggcg gacattttat taaatcaat attgttttg cttttctga  
ggagtctctt tcaagttcat ttttctcat cccatgactt cctccgatg gt  
MNSTLFSQVE NHSVHSNFSE KNAQLLAFEN DDCHLPLAMI FTLLALAYGAV IILGVSGNLA P  
LIIILKQKE MRNVNIIIV NLSFSDLIVA IMCLPFTFVY TLMDFWVGE AMCKLNPFVQ  
CVSITVSIFS LVLI AVERHQ LIINPRGWRP NNRHAYVIGIA VIWVLAVASS LPFLIYQVMT  
DEPFQNVTL D AYKDKYVCFD QPSPDSHRLS YTTLLVLQY FGPLCFIFIC YFKIYIRLKR  
RNNMMDKMRD NKYSRSETR INIMLLSIV AFVCLWPLT IFNTVFDWNH QIIATCNHNL  
LFLCHLTAM ISTCVNPIFY GFNLKNFQRD LQFFNFCD F RSRDDDYETI AMSTMHTDVS  
KTSLKQASPV AFKINNNDD NEKI

379 9834 Corticotropin releasing factor Receptor 1  
n releasing factor  
Receptor 1

agccgagcga gcccgaggat gggaggagcc ccgcagctcc gtctcgtcaa ggccttctc A  
ctctggggc tgaaccccg ctctgctcc ctccagacc agcactgca gagcctgtcc  
ctggccagca acatctcaga caatggctac cgggagtgc ttgccaatgg cagctggcc  
gcccgctga attactcga gtgccaggag atctcaatg agagaaaaa agcaaggtg  
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tacaactact tccatgtgac caactcttc tggatgttc gggagggtgt ctacctgcac  
acagccatcg tgcacacta ctccactgac cggctgcgca aatggatgtt catctgcatt  
ggctggggtg tgccttccc catcatgtg gccctggcca ttgggaagct gtactacgac  
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gccactctgg tgcgtcgc cctcctgggc atcaactaca tgcgttctt cgtcaatccc  
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cagggctctt ttgtgtctgt gtctactgt ttctcaata gtgaggtccg ttctgcatc  
cggaagaggt ggcaccggtg gcaggacaa gactcgatcc gtgcccagat ggcctgtg  
atgtccatcc ccactcccc acccgtgtc agctttcaca gcatcaagca gtccacagca  
gtctga

Homo  
sapiens

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV KALLLLGLNP VSASLQDQHC ESLSLASNIS DNGYRECIAN GSWAARWYS P	Homo sapiens
				ECQEILNEEK KSKVHVAV IINYIGHCIS LVALLAVFL FLRLRSIRCL RNIIHWNLIS	
				AFILRNATWF VVQLTMSPEV HQSNVWCRL VTAANYFHV TNFFWMEGEG CYLHTAIVLT	
				YSTDLRLKWM FICIGWGVFF PIIVAWAIGK LYYDNEKWCWF GKRPGVYTDY IYQGPMLVL	
				LINFIFLNI VRILMTKLRA STTSETIQYR KAVKATLVL PLIGITYMLF FVNPGEDEV	
				RVFIYFNSF LESFQGFVS VFYCFNLSEV RSAIRKRWHR WQDKHSIRAR VARMSIPT	
				PTRVSEHSIK QSTAV	
381	10457	Frizzled-2	NM_001466	cgagtaaaagt ttgcaaaag ggcggggagg ggcagccgc agcgaggagg cggcggggaa A	Homo sapiens
				gaagcgaggt ctccgggttg gggcggggg ggggggggg gccaaggagc cgggtggggg	
				gcgggggcca gcatggggcc cgcagcgcc ctgccccgc tgctgctgcc gctgctgctg	
				ctgccccgc cggggcgcc cagttccac ggggagaagg gcatctccat ccgggaccac	
				ggcttctgcc agccatctc catcccgctg tgcacggaca tgcctacaa ccagaccatc	
				atgccccacc ttctgggcca cagaaccag gaggacgcag gcctagaggt gcaccagttc	
				tatccgctgg tgaagtgca gtgctgcgc gaactgcgt tcttctgtg tccatgtac	
				gcaccgctgt gcaccgtgt ggaacaggcc atccccgct gccgtctat ctgtgagcg	
				gcgcgccagg gctgcgaag cctcatgaac agttcggtt ttacgtggcc cgagcgccgt	
				cgctgcgagc acttccgcg ccacggcgcc gacgagatct gcgtcgcca gaaccactcc	
				gaggacggag ctcccgctt actcaccac gcgcgcgcg cgggactgca gccgggtgcc	
				gggggaccc cgggtggccc gggcgggcg gcgcctccc cgcgtacgc cagctggag	
				caccccttc actgcgcgc cgtctcaag gtgccatctt atctcagcta caagtttctg	
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				tcacaggagg agacgctt cgcgcgcctc tggatcctca cctggtcgtg gctgtgctgc	
				gcttccact tcttactgt caccacgtac ttggtagaca tgcagcgctt cgcctaccca	
				gagcggecta tcattttct gtgcggctgc tacaccatgg tgcgtgtggc ctacatcgcg	
				ggcttcgtgc tccaggagcg cgtgggtgac aacgagcgct tctccgagga cgtttaccgc	
				acggtggtgc agggaccacaa gaaggagggc tgcaccatcc tcttcatgat gcttacttc	
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				ggcatgaagt ggggcccaga ggcacatcag gccaactctc agtacttcca cctggccgc	
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				ctgctgagcg cgtgtgctt cgtaggcctc aacagcctgg accgctgcg gggcttcgtg	
				ctagcgccgc tcttcgtga cctgttcac ggcacgtcct tctcctggc cggcttcgtg	
				tcgctcttcc gcacccgcac catcatgaag cagcagggca ccaagaccga aaagctggag	
				cggctcatgg tgcgcatcg cgtcttctcc gtgctctaca cagtgcctc caccatcgtc	
				atcgcttctt actttacga gcaggccttc cgcgagcact gggagcgctc gtgggtgagc	
				cagcactgca agagcctggc catcccgctc ccggcgact acacggcgcg catgtcgccc	
				gacttccagg tctacatgat caaatacctc atgacgtca tctgtgggcat cagctcgggc	
				ttctggatct ggtcgggcaa gacgtgcac tctgtggaga agttctacac tgcctcacc	
				aacagccgac acggtgagac caccgtgtga gggacgccc caggccggaa ccgcggcg	
				cttctctccg ccgggggtg gggccctaca gactcgtat ttatttttt taaataaaaa	
				acgatcgaaa ccatttctact tttaggttgc tttttaaaag agaactctct gcccaacac	
				ccc	

382	10457	Frizzled-2	NP_001457.1	MRPRLPRL LLPLLLPAA GPAQFHGKQ ISIPDHGFCQ PISIPLCIDI AYNQIMPNL P LGHTNQEDAG LEVHQFYPLV KVQCSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG CEALMNKFGF QWPERLRCEH FPRHGAEOIC VQGNHSEDA PALTTAPPP GLQPGAGGTP GGPGGGGAPP RYATLEHFFH CPRVLKVPSY LSKFLGERD CAAPCEPARP DGSNFFSQEE TRFARLWILT WSVLCCASTF FTVTYLVDM QRFYPERPI IFLSGCYTMV SVAYIAGFVL QERWVCNERF SEDGYRTVVQ GTKKEGCTIL FMWLYFFSMA SSIWWVILSL TWFLAAGMKW GHEAIEANSQ YFHLAAWAVP AVKTTITILAM GQIDGDLISG SCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGFVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY FYEQAFAREHW ERSWVSQHCK SLAIPCPAHY TPRMSPDFTV YMIKYIMTLI VGITSGFWIW SGKTLHSWRK FYTRLNLSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP11Y20)	NM_022571	atggccttac tgggcagcca gcaactccgc gcccccctcg cggccggccc acctggcggg A acttcctcag cggccacggc gccctgtctc tctctcagca ccgtggcgac cggcgcgctg gggaacctga gcgacgcaag cggaggcgcc acagctgcgc ctcccgttg cggcgccctt ggcgggtccg gggaagcgcg ggagggcggg cggcggtga ggccggcgt agggccggag ggcggcgcgc tgcgtgcga cggagctgca gtggcgccc aggcgctcgt cctcctgctc atcttcctgc tgcctagcct tggcaactgc gcggtgatgg ggggtgattgt gaagcacgg cagctccgca ccgtcaccaa gccttcac cgtctcgcgt cctctcagga tctgctcacg gcgtgctct gccctccgc cgccttcctg gaccttca ctcgcccgg gggttcggcg cctgcgtgc ccgcggggccc ctggcgccc tctgcggc caagcgcctt cttcagctcg tgcttcggca tgcgtacgc tcagcgtggc gctcactcgc ttggaccgtt actgcgctat cgtcggcgc cgcgggagaa gatcggcgc cgcgcgcgc tgcagctgct ggcggcgccc tggtgacgg ccctgggctt ctcctgccc tgggagctgc tggggcgccc ccgggaactc gcggcgggcc agagctcca cggctgcctc taccgacct cccggagccc cgcgcagctg ggcgccccct tcagcgtggg gctggtgtg gccgtctacc tgcgtccctt cctgctcctc tgcttctgcc actaccacat ctgcaagacg gtgcgcctgt cggacgtgcg cgtgcggcgg gtgaacacct acgcgcgct gctgcgttct tcagcgaggt gcgcacggcc accaccgtcc tcatactga	Homo sapiens
384	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP11Y20)	NP_072093.1	MALLGSHSG APSAAGPPGG TSSAATAAVL SFSTVATAAL GNLSASGGG TAAAPGGGGL P GGSGAAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVILL IFLSSLGNC AVMGVIVKHR QLRTVTNAFI LSLSLDLLT ALLCLPAFL DLFTPPGSA PALPAGPWRG FCRPSRFSS CFGIVYAQRG AHLVGPLLY RRPPEKIGR RRALQLLAGA WLALGFSLP WELLGAPREL AAGQSFHGCL YRTSPDPAQL GGPFVGLV ACYLLPFLLI CFCHYHICKT VRLSDVRVRP VNTYARVLR SARCAPPSPS SS	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga cagaaggtgg atagacaaat ctcacacctt agactggtag gctcctccag A aagccatcag acaggaagat gtgaaatcc ccagcactca tcccagaatc actaagtggc acctgtcctg ggccaaagtc ccaggacaga cctcattgtt cctctgtggg aatacctccc caggaggcca tccgtgattt cccccttga acccaggtca gaagtattcat cgtcaaggtt gtttcatctt ttttttctg tctaacagct ctgactacca cccaacctg aggcacagt aagacatcgg tggccactcc aataacagca ggtcacagct gctcttctgg aggtgtccta caggtgaaaa gcccgagcgc ccagtcagga ttttaagttta cctcaaaaaa ggaagatttt	Homo sapiens

aacatggaga gtgacagcgtt tgaagatttc tggaaagtgt aagatcttag taattacagt  
tacagctcta cctgcccc ttttctacta gatgcgcccc catgtgaacc agaaccctg  
gaaatcaaca agtattttgt ggtcattatc tatgccttgg tattcctgct gagcctgctg  
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gtctacctgc tgaacctagc cttggccgac ctactctttg cctgacctt gccatctgg  
gccgctcca agtgaaatgg ctggattttt ggcacattcc tgtgcaaggt ggtctcactc  
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cagaagcacc gggccatgcg ggtcatcttt gctgtcgtcc tcatttccct gctctgctgg  
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acctgtgagc gccgcaatca catcgaccgg gctctggatg ccaccagat tctgggcac  
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cctaagtga gccctgggg ttctccctt ctcttcaac tcacattcca agcctcatgt  
ccactgggtc ttcttggtct cagtgtcaat ctcttcaac ttgtggtcac aggaagtga  
ggaggccacg ttcttactag ttcccttgc atggtttaga aagcttgccc tgggtgcctca  
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aacccatatt tgtacaccaa tattcatagc agcttattca caagacccaa aaggcagaag  
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cgaagtatcc ttcagcctga aagaggaatg aagtactcat acatgttaca acacggagca  
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ttccacctac atgagggtact gagagtgaac aaatttccag agacagaaaa cagaacagtg  
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gacttaatgc cactaaattg acacttaaaa atggtttaa tggtaaat ttttatgtat  
attttatc aatttaaaaa aaacctgag ccccaaaagg tattttaac accaaggctg  
attaaaccaa ggctagaacc acctgcctat atttttgtt aaatgatttc attcaatata  
tttttttaa taaaccattt ttacttgggt gtttat

386	14198	Interleukin-8 Receptor B	NP_001548.1	MEDFNMESDS	FEDFWKGEDL	SNYSYSSTLP	PFLDDAAPCE	PESLEINKYF	VVTIYALVFL	P	Homo sapiens
				LSLLGNLSVM	LVILYSRVGR	SVTDVYLLNL	ALADLLFALT	LPIWAASKVN	GWIFGTFLCK		
				VVSLKEVNF	YSGILLIACI	SVDRYLAIVH	ATRTLQKRY	LVKFICISIW	GLSLLALPV		
				LLFRRTVYS	NVPACYEDM	GNNTANWRML	LRILPQSGF	IVPLLLIMLFC	YGFTLRTLK		
				AHMGQKHRAM	RVIFAVVLIF	LLCWLPYNLV	LLADTLMRQ	VIQETCERN	HIDRALDATE		
				ILGILHSCIN	PLIYAFIGQK	FRHGLLKILA	IHGLISKDSL	PKDSRPSFVG	SSSGHTSTTL		
387	14641	Calcitonin Receptor	NM_001742	cagaattcca	ggacaagag	atcttcaaaa	atcaaaaccca	aggttcacat	ttacaagccg	A	Homo sapiens
				gtgcttgcca	ctgtttcttc	ttctaaatca	cccaacccca	atctctctcg	ctttttcaaa		
				tcaaacctat	ccaacaatag	agcccaagcc	atttctttac	gtcgttagac	gaaaagaagat		
				gatggatgca	cagtacaaat	gctatgaccg	aatgcagcag	ttaccgcgat	accaaggaga		
				aggtccatat	tgcaatcgca	cttggtgatg	atggctgtgc	tgggatgaca	caccggctgg		
				agtattgtcc	tatcagttct	gccagatta	ttttccgcat	tttgatccat	cagaaaaggt		
				tacaaaatac	tgtgatgaaa	aaggtgtttg	gtttaaacat	ctgaaaaca	atcgaacctg		
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				gattttcgtg	tttttcagga	gccttgctg	ccaaagggtg	accctgcaca	agaacatgtt		
				tcttacttac	attctgaatt	ctatgattat	catcatccac	ctggttgaag	tagtacccaa		
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				catgatggcc	tgcaactatt	tctggatgct	ctgtgaagg	atctatcttc	atacactcat		
				tgctgtggct	gtgtttactg	agaagcaacg	cttgcggtgg	tattatctct	tgggctgggg		
				gttcccgctg	gtgccaacca	ctatccatgc	tattaccagg	gccgtgtact	tcaatgacaa		
				ctgctggctg	agtgtggaaa	cccatttgc	ttacataatc	catggacctg	tcattggcggc		
				acttgtggtc	aatttcttct	ttttgtctca	catgtgcgg	gtgcttgtga	ccaaaatgag		
				ggaaacccat	gaggcggaat	ccacatgta	ctgaaaggct	gtgaaggcca	ccatgatcct		
				tgtgcccctg	ctgggaatcc	agtttgtcgt	ctttccctgg	agaccttcca	acaagatgct		
				tggaagata	tatgattacg	tgatgcactc	tctgattcat	ttccagggtc	tcttgttgc		
				gaccatctac	tgcttctgca	acaatgaggt	ccaaccacc	gtgaagcgc	aatgggccc		
				attcaaaatt	cagtggaaac	agcgttgggg	gaggcgccc	tccaaccgct	ctgctcgcc		
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				gaatgaacca	gccaacaacc	aaggcgagga	gagtgcctgag	atcatccctt	tgaatatcat		
				agagcaagag	tcactctgct	gaatgtgaag	gcaaacacag	catcgtgatc	actgagccat		
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				tatcatttgt	gaagaattat	tcagtgaatt	tgtccattgt	aaatctgaag	aaagtatttc		
				ttggtactgt	tgctttggga	gacagtctag	gaatggagtc	tcaccactga	acttgtgaac		
				tcacatcatc	atccaggact	gagatgcaaa	tgtcacagta	atgcaagcaa	agtatcaaa		
				aaaaacaatg	aaattgacct	agttcagata	cagggtgctc	cttgtcaata	ctgagccatt		
				tatacctttg	aaatattaaa	atcactgtca	atatttttat	tttaactct	ggattttgaa		
				ttagattatt	tctgtatttg	gctatggatc	gtatttttaa	tttttttaa	tttcagtcaa		
				ttctgatgtt	actgagatgt	tttaccatcc	ttacaatgta	aaccacatga	actacgtgac		
				ctctgcaaga	caaaagcggc	ttctaataga	gagattagta	aatatgtgaa	gaaaaagacc		
				tgcaatttggc	aggaagatgt	atgctttgaa	tgcaaaaaga	atttagagtc	aatttgcctga		

388	14641	Calcitonin Receptor	NP_001733.1	<p> aaacattaca tgcacagctt ggcttggac aagcctgtcc attgggcagg acctagctgt  tgtaagaat tggcttaaat gttgaatgta ttttgggtgc tgatgtttat aaactgagag  gtcacaaaga atctatcact aaaaattttt aaaaactgac caaaatata attcttagtg  gaagacaata ctccctttta agagagtttg ccactccctt aaactccagg atttataaag  caaattactc caaggtttat aaagcagatt acctcttgcc ctgggtgtgt atctagcagt  aaaagataaa tttgttgaat attggttaatt aaagactacc acataagtcc attaactgct  ttccaccagg ctccaagct taaaagagc tcaggctttt ccaggaagat ccaggagggc  taattagaag tcaacttgtg gttgaccgct tgttcttgtt tattaccaa caggagggga  aaaaattaac tgcctcaaat ttaaccataa atcaattcat gtttaacgtt tctcattaaa  atccagtatt atattatcat atctctctt accctccagt atagattttt tgaaaaatcct  gaataaacca gtatcgttac tggcacctga aattaatttg tgaatttgca acagtaatca  gagttaccat tatttaattt gtatgctaaa tgaggaggtta cattgaaacc ctccaaatct  ccagtctcat ctatgtcata ttttgccact gcccttcaga agtgatttag ttgtggaag  ataataaatt gatttgttat ggttacatat tttagccacc cagagaaaaa taattatatt  tctacagaga aaatgaattt gggatactaa agtagtttaa gtctccttta ctgaatgtaa  gggggggac gaaagaagg tatttttcca atcacagtgt tatgtagtat tgttctattt  ttgtttacaa acatggaaaa cagagtattt tggtacaaat ggtacaaat gtgataatat  attgctaaaa tattttagat gttattatgc taatatagta ggggttgaag aaaaacaaa  agcttattat agaattgcac atagttctgc ccaaatatg tgaatgtcct atgcttgtgt  atatgtataa attaatcac agtacgttaa aagcaaaaaa atgtatatatt gcataatttt  ctaaagaaat atattatca tcttttcatt c </p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p> PSNRSAARAA AAAEAGDIP IYCHQELRNE PANNOGEESA EIPLNIIIEQ ESSA  caaacgttcc caaatcttcc cagtcggctt gcagagactc ctgtctcca ggagataacc A  agaagctgca tcttattgac agatgggtcat cacattgggt agctggagtc atcagattgt  ggggcccgga gtgaggctga agggagtga tcaagagcact gcctgagagt cacctctact  ttcctgctac cgtgcctgt gagctgaagg ggcgtgaacca tacactcctt ttctacaac  cagcttgcat ttttctgcc caaatgagc ggggaatcaa tgaatttcag cgaatgttttc  gactccagt agattattt tgtgcagtc aatacttcat attactcagt tgattctgag  atgttactgt gctccttga ggaggtcagg cagttctcca ggctatttgt accgattgcc  tactccttga tctgtgctt tggcctcctg gggaatattc tgggtgtgat caccttgtct  ttttataaga aggccaggtc tatgacagac gtctatctct tgaacatggc cattgcagac  atcctctttg ttcttactc cccattctgg gcagtgtgtc atgccactgg tgcgtgggtt  ttcagcaatg ccacgtgcaa gttgctaaaa ggcattctatg ccatcaactt taactgcggg  atgctgctoc tgacttgcat tagcatggac cgttatcatg ccattgtaca ggcactaag </p>	Homo sapiens



tcattccggc tcgatccag aacactaccg cgcacgaaaa tcactgcct tgttgtgtgg  
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aactcatgtt tttaaaggc latgtaata tatgaacatt agaaaaatag caacttgtt  
tcaaaaaa caaacacatg ttaggaaagt actgtcatgg gctaggcatg gtggtcaca  
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390	16041	C-C Chemokine Receptor 6	NP_004358.1	<p>           aaaaaatgtg tttgtacat gaagtaggaa tcgtatttca gcttcaaggt tcagattgag            ggcccaatg tttggagagg atggtattca ggctttctca tgccttcaa atctgttagc            gttgactct agaaatcaaa gcaaaaggagt ggttaccag acacttctt tgggtgtgac            aatgcgctga tgtgatctat gaagatgatt catgcttgaa aactagcaca gaaacatctt            gcttatttgc caaagctggg agatgagctt ctctgcataa tttaaatgtt cagataaatg            aagctgactt atttaagcaa taacctttta aacattttag ctaagatgta taaaaatgtt            tccaaaaatat accacatact ttattttctt ttaaatgtag tacattaggt tacatcatct            ttcttgctgt cttgggcatac aaaaacaggtg ccatggtaac ctgacactct caggagacat            taagatagaa ggggctgttc ttcaagtgtt cccattgatt ctcccataat ctttttgc            tcaggctctg gccgtctctt cctgagcctt aactgtgt            MSGESMNFSD VFDSESDYFV SVNTSYYSVD SEMLLCSLQE VRQFSRLFVP IAYSLLICVFG P            LLGNILVVIT FAFYKARSM TDVYLLNMAI ADILFVLTLF FMAVSHATGA WFFSNATCKL            LKGIYAINFN CGMLLTCTIS MDRYIAIVQA TKSFRLRSRT LPRTKIICLV VMGLSVIISS            STFVFNQKYN TQGSDVCEPK YQTVSEPIRW KLMLGLELL FGFPIPLMFM IFCTYTFIVKT            LVQAQNSKRH KAIRVIAV LVFLACQIPH NMVLIVTAAN LGRNRSQCS EKLIGYTKTV            TEVLAFLHCC LNPVLYAFIG QKFRNYFLKI LKDLWCVRRK YKSSGFSCAG RYSENISRQT            SETADNDNAS SFTM         </p>	Homo sapiens
391	16599	Smoothened	NM_005631	<p>           atggcgcgtg cccgccagc gggggggcgg gagctccgc tctgtggggt gctgtgctg A            ctgctgctgg gggcccgagg cggggggggg gctcgagcg ggaacgcgac cgggcctggg            cctcgagcgg cggcgaggag cgcgaggagg agcgcggcgg tgaactggcc tcgcgcgcg            ctgagccact cggcgcgagg tgcgccctgc gagcgcgtgc gctacaaagt gtgcctgggc            tcggtgctgc cctacggggc cactccaca ctgctggcgg gagactcga ctcocaggag            gaagcgacg gcaagctcgt gctctggtcg ggcctccgga atgcgcccg ctgctgggca            gtgatccagc cctgtgctgtg tgcctgtatc atgcccagt gtgagaatga cgggtggag            ctgccagcc gtaccctctg ccaggccacc cgaagccct gtgccatcgt ggagaggagg            cggggtggc ctgacttctt gcgctgcact cctgaccgt tccctgaagg ctgcacgaat            gaggtgcaga acatcaagt caacagtcca ggcagtgcg aagtgcctt ggttcggaca            gacaaccca agagctgga cgaggacgtg gagggctgcg gcattccagt ccagaacccg            ctcttcacag aggtgagca ccaggacatg cacagtaca tgcggcctt cggggccgtc            acgggctctt gcagctctt caccctggc acattgctgg ctgactggcg gaactcgaat            cgctaccctg ctgttattct ctctacgtc aatgcgtgct tctttgtgg cagcattggc            tggctggccc agttcatgga tgggtccgc cgagagatcg tctgcccgc agatggcacc            atgaggcttg gggagccac ctccaatgag actctgctt gcgtcatcat ctttgcctc            gtgtactacg cctgtatggc tgggtgtggt tggttgtgg tctcaccta tgcctggcac            acttcttca aagccctggg caccacctac cagctctct cgggcaagac ctctacttc            cacctgtca cctggtcact cccctttgtc ctactgtgg caatccttgc tgtggcgag            gtggatgggg actctgtgag tggcatttgt tttgtgggtt acaagaacta ccgataccgt            gcgggcttctg tgcgtggccc aatcggcctg gtgctcatcg tgggaggcta cttcctcatc            cgaggagtca tgactctgtt ctccatcaag agcaaccacc cggggtgct gagtgagaag            cgtgccagca agatcaacga gacctgctg cgctcgggca tttttggctt cctggcctt            ggctttgtgc tcattacctt cagctgccac ttctacgact tcttcaacca ggctgagtgg         </p>	Homo sapiens

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393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPPQDPFLP SAPAPVAWAH GRRQGLGPIH SRTNLMDEL MDADSDF	atggcctgca acagcacgtc ccttgaggct tacacatacc tgctgctgaa caccagcaac A gcctcagact cggggtccac ccagttgccc gcacccctca ggatctcctt ggccatagtg atgctgtga tgaccgtggt ggggttcctg ggcaacactg tggtctgcat catcgtgtac cagaggccgg ctatgcgtc gccatcaac ctgctgctgg ccacccctggc cttctccgac atcatgtgt cctctgtg catgcccttc accgcgtca cctcatcac cgtgcgtgg cactttgggg accatttctg ccgcctctca gccacgtct actggttttt tgctctggag ggcgtggcca tctgtctcat catcagcgtg gaccgtctcc tcatcatcgt ccagcgccag gacaagtga acccgccgag ggccaaagggt atcatcgcg tctcctgggt gctgtccttc tgcatcggg ggccctcgt cagggctgg acgctggtgg aggtgccggc gcgggcccca cagtgcgtgc tgggtacac ggagctccc gctgaccgg catacgtggt cacttggtg gtggcgtgt tcttcggcc ctttggcgtc atgtgtgctg cctacatgtg catcctcaac acggtccgca agaagccgt gcgctgac accagctgg acagcctgga cctgcggcag ctcacccagg cgggctgctg gcgctgcag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcac caccatcctg atcctctcg tgggtcttc cctctgctgg ctgccccact cgtctacag cctcctgtct gtgtttagcc agcgtttta ctgcggttcc tcttctacg ccaccagcac ctgcctcctg tgggtcagtt acctcaagtc cgtcttcaac cccatcgtct actgctggag aatcaaaaaa ttccgctgg cctgcataga gttgctgcc cagaccttcc aaatcctccc caaagtgcct gagcggatcc gaaggagaat ccagccaagc acagtatacg tgtgcaatga aaacagctct gcggtttag	Homo sapiens
394	17250	G Protein- Coupled Receptor GPR45	NP_009158.1	QPMRMSAIN LLLATLAFSD IMLSCLMPF TAVTLITVRW HFGDHFCLRS ATLYWFFVLE GVAILLIISV DRFLIIVQRQ DKLNPRRAKV IIAVSWLSF CIAGPSLTGW TLVEVPARAP QCVLGYTELP ADRAVWTLV VAVFFAPFGV MLCAYMCILN TVRKNVAVRH NQSDSLDLRQ LTRAGLRRLQ RQOQVSDLS FKTKAFTIL ILFVGFSLCW LPHSVYSLLS VFSQRFYCGS SFYATSTCVL WFSYLKSVFN PIVYCWRIKK FREACIELLP QTFQILPKVP ERIRRIQPS TVYVCNENQS AV	Homo sapiens	
395	17345	G Protein- Coupled Receptor D6	NM_001296	ggtcttatga gctgctattg aacacggcag agcctggtgg tgacctgcac acaggagccc A tccagtcagt actgattgaa ttactcaagg ctgcctctct gcaagtgtga gcactacagg acgtcgggac tgggcatttc ctccaacat gccgcceact gcctctccg agccactcgc cactgaggat gccgattctg agaatagcag cttctattac tatgactacc tggatgaagt ggccttcgat ctctgcagga aggatgcagt ggtgtccttt ggcaagtct tctccccagt cttctatagc ctgatttttg tgttggcct cagcgggaac ctcttcttc tcatggtctt gtcccggtac gtgcctcgca ggcggatggt tgagatctat ctgctgaate tggccatctc caaccttctg tttctggtga cactgccctt ctggggcctc tccgtggcct ggcatgggt cttcgggagt ttcttgtgca agatggtgag cactctttat actattaaact tttaacagtgg catcttttct attagctgca tgagcctgga caagctcctg gagatcgttc atgctcagcc ctaccacagg ctgaggaccc gggccaagag cctgctcctt gctaccatag tatgggctgt gtccctggcc gtctccatcc ctgatatggt ctttgtacag acacatgaaa atcccaaggg tgtgtggaac tgccacgcag atttcggcgg ccatgggacc atttgggaag tcttctctccg	Homo sapiens	

396	17345	G Protein- Coupled Receptor D6	NP_001287.2	cttccagcag aacctoctag ggtttctctt tccactcctt gccatgatct tcttctactc ccgtattggt tgtgtcttgg tgaggctgag gcccgcaggc cagggcggg ctttaaaaa agctgcagcc ttggtggtgg ccttctctgt gctatggttc ccatacaatc tcaacttgtt tctgcatacg ctgttgacc tgcaagtatt cgggaactgt gaggtcagcc agcatctaga ctacgcactc caggtaacag agagcatgc cttccttcac tgctgctttt ccccatcct gtatgcttc tccagtccac gcttcgcca gtacctgaag gcttctctgg ctgcccgtgt tgatggcac ctggcacctg gcactgcca ggcctcatta tccagctgtt ctgagagcag catacttact gcccagagg aatgactgg catgaatgac cttggagaga ggcagtctga gaactacct aacaaggagg atgtgggaa taaatcagcc tgagtaccca aattttggtc tggtgggac agatgggaa cagctcaatt ggtgtccac tcaaatgtct c MAATASQPL ATEDADSENS SFYYDYLD VAFMLCRDA VVSGKVFLP VFYSLIFVLG P LSGNLLLMV LLRYVPRRM VEIYLLNLAI SNLLFLVLP FWGISVAWHV VEGSFLCKMV STLYTINFYS GIFFISCMSL DKYLEIVHAQ PYHRLTRAK SLLLATIWA VSLAVSIPDM VFVQTHENPK GWNCHADFG GHGTIWKFLF RFQONLLGFL LPLLAMIFFY SRIGCVLVR RPAGQGRALK IAAALVVAFF VLMFPYNLT FLHTLLDIQV FGNCVVSQHL DYALQVTE AFLHCCFSPI LYAFSSHRFR QYLKAFLA V LGWHLAPGTA QASLSSCSES SIITAQEEMT GMNDLGERQS ENYPNKEDVG NKSA	Homo sapiens
397	17335	Gaba (b) Receptor 1	NM_001470	cgctccccgc tccgtggct gcccgcgcc cggggaagaa gagacagggg tggggttgg A gggaagcgag agaggagggg agacacccgt gccagctggg agctggatt cgaggggagg agggaacggga ggaggagaaa ggtggaggag agggagggg gaggcgggga gaggcggcc ggcctggggc cttgagccc ggggagagcc ggggagcgg cgcgcgcgc cgagatgttg ctgctgtgt tactggcgc actctctc cgcgcccg ggcggggcg ggcgcagacc cccaacgcca ctcagaagg ttgccagatc atacccgc cctgggaagg gggcatcagg taccggggcc tgactcggga ccaggtgaag gctataact tctggcagt ggactatgag attgagtatg ttgtccgggg ggagcgcag gtggtgggg ccaaggtccg caagtgcctg gccaacggct cctggacaga tatggacaca ccagccgct gtgtccgaat ctgctccaa tcttattga cctgggaaa tgggaagggt ttctgacgg gtggggacct ccagctctg gacggagccc ggttgattt cgggtgtgac ccgacttcc atctggtgg cagctcccg agcatctgta gtcaggggcca tggagacc ccaagcccc atgcccagg gaatcgaacg ccacactcag aacggcgcgc agtgtacatc gggcaactgt tccccatg cgggggctgg ccagggggcc aggcctgcca gcccgggtg gagatggcg tgagagacgt gaatagccg agggacatcc tgcgggacta tgagctcaag ctcatccacc acgacagcaa gtgtgatcca ggccaagcca ccaagtacct atatgagctg ctctacaacg acctatcaa gatcatcctt atgctgggt gcagctctgt ctccacgtg gtggtgagg ctgctaggat gtggaacctc attgtgcttt cctatggctc cagctacca gccctgtcaa accggcagcg ttccccact ttcttcgaa cgcaccatc agccacact cacaaccta cccgcgtgaa actctttgaa aagtggggct ggaagaagat tgctaccatc cagcagacca ctgaggtctt cacttggact ctggacgacc tggaggaaag agtgaaggag gctggaattg agattacttt ccgccaagat ttcttctcag atccagctgt gcccgtcaaa aacttgaagc gccaggatgc ccgaatcatc gtgggacttt tctatgagac tgaagcccg aaagtgtttt gtgaggtgta caaggagcgt ctctttggga agaagtacgt ctggttctc attggtgtgt atgctgacaa ttggttcaag	Homo sapiens

atctacgacc cttctatcaa ctgcacagtg gatgagatga ctgaggcggg ggaggggccac  
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398	17535	Gaba (b) Receptor 1	NP_001461.1	MLLLLLLAPL FLRPPGAGGA QTPNATSEGC QIIHPPEWEGG IRYRGLTRDQ VKAINFLPVD P YEIEYVCRGE REVVGPKVRK CLANGSWTDM DTPSRVCVRIC SKSYLTLENG KVFLTGGDLP ALDGARVDFR CDPDFHLVGS SRSICSGQW STPKPHCQVN RTPHSERRAV YIGALFPMSSG GWPGGQACQP AVEMALEDVN SRRDILEDYE LKLIHDSKC DPGQATKYLY ELLYNDFIKI ILMPGCSVS TLVAEARMW NLIVLSYGSS SPALSNRQRF PTFERTHPSA TLHNPTRVKL FERGWKKIA TIQOTTEVFT STLDDLEERV KEAGTEIFER QSFSDPAVP VKNLKRQDAR IIVGLFYETE ARKVFCEVYK ERLFGKKYVW FLIGWYADNW FKIIDPSINC TVDEMTAEVE GHITTEIVML NPANTRISN MTSQEFVEKL TKRLKRHPPEE TGGFQEAFLA YDAIWAIALA LNKTSGGGR SGVRLEDFNY NNQITDQIY RAMNSSFEG VSGHVVFEDAS GSRMAWTLIE QLQGSYKKI GYVDSTKDDL SWSKTDKWIG GSPADQTLV IKTRFSLSQ LFISVSVLSS LGIVLAVVCL SFNIYNSHVR YIQNSQNLN NLTAAGCSLA LAAVFPLGLD GYHIGRNQFP FVQARLWLL GLGFSLGYGS MFTKIWWVHT VFTKKEEKE WRKTLERPKL YATVGLIVGM DVLTLAIWQI VDPLHRTIET FAKEEPKEDI DVSILPQLEH CSSRKMNTWL GIFYGYKGLL LLLGIFLAYE TKSVSTEKIN DHRAVGMAIY NVAVLCLITA PVTMILSSQQ DAAFAFASLA IVFSSYITLV VLFVPMRRL ITRGEWQSEA QDTMKTGSST NNNEEEKSRL LEKENRELEK IIAEKEERSV ELRHQLQSRQ QLRSSRRHPPT PPEPSGGLPR GPPEPPDRLS CDGSRVHLLY K	Homo sapiens
399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	gaattccggg ttgtgcatc cactctggaa ccgtctgtgt gtggcctgtc ggaatgacat A cgccctcatc agtctccga cgcgttcccc aggtggcagc gatggcccag tcctgaactc cccgccatgg ccggcgcccc ccggccgctg cgccttgccg tgctgtgtgt cgggatgggtg ggcaggggcg gccccggccc ccagggtgcc actgtgtccc tctgggagac ggtgcagaaa tggcgagaat accgacgcca gtgccagcgc tccctgactg aggatccacc tcctgccaca gacttgttct gcaaccggac cttecatgaa tacgcctgct gccagatggg ggagccaggg tegttcgtga atgtcagctg cccctgggtac ctgcccctgg ccagcagtgt gccgcagggc cacgtgtacc ggttctgcac agctgaaggc ctctggctgc agaaggacaa ctccagcctg ccctggaggg acttgtcgga gtgcgaggag tccaagcag gggagagaa cccccggag gagcagctcc tgttctcta cateatctac acggtgggt acgcactctc cttctctgt ctgggtatcg cctctgcgat cctctcggc ttcagacacc tgcactgcac caggaaactac atccacctga acctgtttgc atcctcatc ctgcgagcat tgtccgtctt cateaggac gcagccctga agtggatgta tagcacagcc gccagcagc accagtggga tgggtctctc tcctacctgg actctctgag ctgcgcgctg gtgtttctgc tcatgcagta ctgtgtggcg	Homo sapiens

400	17666	Glucagon- Like Peptide 1 Receptor	NP_002053.1	gccaattact actgggtctt ggtggagggc gtgtacctgt acacactgt ggccttctcg gtcttatctg agcaatggat cttcaggctc tacgtgagca taggtgggg tggtccctcg ctgtttgttg tccctgggg cattgtcaag tacctctatg aggacaggg ctgctggacc aggaaactcca acatgaacta ctggctcatt atccggctgc ccattctctt tgccattggg gtgaacttcc tcattttgt tcgggtcatt tgcatctgg tatccaaact gaaggccaat ctcatgtgca agacagacat caaatgcaga cttgccagt ccacgtgac actcatcccc ctgctgggga ctcattgagt catctttgct ttgtgatgg acgagcacgc cggggggacc ctgcgttca tcaagctgtt tacagagctc tcctcaact ccttcaggg gctgatggtg gccatattat actgctttgt caacaatgag gtccagctgg aatttcggaa gagctgggag cgctgggggc ttgagcactt gcacatccag agggacagca gcatgaagcc cctcaagtgt cccaccagca gctgagcag tggagccacg gcgggcagca gcatgtacac agccacttgc caggcctcct gcaagtga ctcacagccc tgccctcctt ggggtccttg ctgcagcggg gtggccaatc cagctcccc cacaatatc	SLWETVQKWR EYRQCQRL TEDPPPATDL P WASSVPQGHV YRFCTAEGIW LQKDNSSLPW GYALSFSALV IASAILLGR HLHCTRNYIH QHQWDGLSY LDSLSCLRV LMQYCVAAV SIGWGFILF VVPWGVKYL YEDEGCWTRN VVSKLKANLM KYTDIKCRLA KSTLTLLPLL TSFQGLMVAI LYCFVNEVQ LEFRKSWERW SSMYTATCQA SCS	Homo sapiens
401	18471	G Protein- Coupled Receptor LOC51210	NM_016372	gccttgaca tggagatgct tagctgaggg ggtggctttg ttaqactatt tgcaggtcgt A gagatagagc ctgagatggg ggactggggc cctgcctggg ggattgggtc gtgacctgtg tggagcccca cactgagctg cagtgggtgg ggaggttggg ttacaggggt gctctgtgca gccccctga ttttccctg ggagtcceag gtccagggga aggagacag tggccacagg cacacagctc actgggcggc tctcactccc ccagggtgg ctgctggcgg gatggacacc ctggaggagg tgacttgggc caatgggagc acagcgctac cccaccctt ggcaccaaac atcagtgctc ctcactgctg cctgctgctg ctctacgaag acattggcac ctccagggtc cggtaactgg acccttctgt gctcactccc aatgtgctct tcctcatctt cctgctctgg aagcttccat ctgctcgggc gaagatccgc atcactcca gcccaatttt tatcaccttc tacatccctg tgtttgtggt ggcgctgggt ggcatgtccc ggccctgggt atccatgacg gtgagcacct cgaacgctgc aactgttctt gataagatcc tbtgggagat caccgccttc ttcctgctgg ccacgagct gagtgtgac atcctgggccc tggccttttg cacctgggag agtaagtcca gcatcaagcg ggtgctggcc atcaccacag tctgtccctt ggccactctt gtcaccacgg ggaacctgga gactctgtac cctgatgccc atctctcagc tggagacttt aatactatg gccatggggg ccgcccagttc tggctgtgca gctcctgctt cttcttctg gtctactctc tgggtgtcat ccttcccaag accccgtga aggagcgcat ctcctgctt tctcggagga gcttctactg gtatgggggc atcctggcac tgcctcaacct actgcagggg ctggggagtg tctgctgtg cttcgacatc atcgaggggc tctgctgtgt agatgccaca accttctgt actcaagctt cttcgtcccg ctcatctacg tggcttctct ccggggcttc ttcggctcgg agcccaagat cctcttctcc tacaatgccc aagtggacga gacagaggag	FCNRTFDEYA CWPDEPGSF VNVSCPWYLP RDLSECEESK RGERSSPEEQ LLFLYIIYTV LNLFASFILR ALSVFIKDA LKMMYSTAAQ YYWLLVEGVY LYTLIAFSLV SEQWIFRLYV SNMNYWLIIR LPILFAIGNV FLIFVRVICI GTHEVIFAFV MDEHARGTIR FIKLETELSF RLEHLHIQRD SSMKPLKCPT SSLSSGATAG	Homo sapiens



402	18471	G Protein- Coupled Receptor LOC51210	NP_057456.1	MDTLEEVTWA NGSTALPPPL APNISVPHRC LLLLYEDIGT SRVRWDLLL LIPNVLFILF P LLWKLPASARA KIRITSSPIF ITFYILVFV ALVGIARAV SMTVSTSNAA TVADKILWEI TRFFLLAIEL SVIILGLAFG TWESKSSIKR VLAITTVLSL AYSVTQGTLE ILYPDAHLA EDFNHYGHGG RQFWLVSSCF FFLVYSLVVI LPKTPLEKRI SLPSRRSFYV YAGILALLNL LQGLGSVLLC FDIIEGLCCV DATTFLYFSF FAPLIYVAFL RGFFGSEPKI LFSYKQCQVDE TEEPDVHLPQ PYAVARREGL EAAGAAGASA ASYSTOFDS AGGVAYLDDI ASMPCHTGTGI NSTDSERWKA INA	Homo sapiens
403	19072	G Protein- Coupled Receptor Ls19072	LG100650	agtgatgagc ggcggctgccc tggcagtgca gtgggctggc tggatatgtgg gggcctctcc A ctgctggcca atgctctggg catctcagc gttggcgcca agcagaagaa gtggaagccc ttggagttcc tgcgtgtgac actcgcggc accacatgc taaatgtggc cgtgcccac gccacctact ccgtgggtgca gctgcggcgg cagcgcggc actcagatg gaatgaggt ctctgcaagg tcttcgtgc cactcttac accctaccc tggccacctg tttctctgc acctccctct cctaccaccg catgtggatg gctgctggc ctgtcaacta ccggtgagca tgtgaagtcc tggggttctt ggggttctaa gcaggcgtga aaacaaagac atatctggtg tgccatgcyg cacacaggag tggccacacc tgtggcagtc tgggagggca ggcaggctca ggaggggctg ctgtaagctg ctgggggcat acacgtagct ttgcatgggt agacacaagc agccaataca gaatgcttgg aagagggacg tgtgacaatg ttcacagtat ctcctatgca aggaacaagg ccttgccaca ctggctgtgc catgactatg atatactgg ggtgtgggt gcctgggtgg tgcggtccc ctacaggctc ccaggacct ggggaggccc tgtgggtgac gccagatccc tctgttccac cctgcctcat gccaggctga gcaatgcaa gaagcaggcg gtgcacacag tcatgggtat ctggatggtg tcttcatcc tftcggccct gcctgcccgt ggctggcacg acaccagca gcgctctac accatggct gcggtctcat cgtggctgag atcgggctgg gcttggcgt ctgcttctg ctgcttctg gcggcagcgt ggcctatggc gtgatctgca cagccatgc cctcttccag acgctggccg tgcagggtgg gcgccaggcc gaccgcgcg ccttcacct gccaccatc gtgggtggag acgcgaggc caagcggcg tcctccatcg atgggtcgga gccgcgaac accctctgc agaccacgg cctcgtgacc accatagtct tcatctacga ctgctcatg ggtctccctg tgcgtgtgg tgacggcgtc gggtagaggg gcctgtctct ggacagccc tggggtgct catactccag gcacagggtg gttgagtcct cagacccaat cctttgagat gggtctgac atcgtcccca ttttccagat	Homo sapiens

[illegible]

405	19501	Ls19072	G Protein- Coupled Receptor KIAA0758	AB018301	<p>GSVAMGVICT AIALFQTLAV QVGRQADRRRA FTVPTIVVED AQKRRSSID GSEPAKTSIQ  TTGLVTITVF IYDCLMGFPV LVVSFSSIRA DASAPWALC VLWCSVAQAL LLPVFLWACD  RYRADLKAVR EKCMLMAND ERSDDG</p> <p>gtgcaagaag aaatagatg ttatgcccac ccaaatatttg gcaaatgaag aaatgaaggt A  gatgtgcgac acaaatccctg tatctttgaa ctgctgcagt cagggtaatg ttaattggag  caaagtagaa tggagcagg aggaaaaaat aaattatcca ggaacccctg agacagacat  agattctagc tgcagcagat acaccctcaa gctgatgga acccagtgc caagcgggtc  gtctggaaca acagtcacat acacttgtga gtccatcagt gcttatggag ccagaggcag  tgcaaacata aagtgacat tcatctctgt ggccaatcta acaataaccc cggacccaat  ttctgtttct gagggacaaa acttttctat aaaatgcac agtgatgtga gtaactatga  tgagggttat tggaaacatt ctgctggaat taaaatatac caagatttt ataccacgag  gaggtatctt gatggagcag aatcagctac gacagtcagg acccgcacca gggagtggaa  tggaaacctat cactgcatat ttagatataa gaattcatat agtatigcaa ccaaagacgt  cattgttcac ccgctgcctc taaagctgaa catcatgggt gaccctttgg aagctactgt  ttcatgcagt ggttcccac acatcaagtg ctgcatagag gaggatggag actacaaagt  tactttccat atgggttctt catccctcc tgctgcaaaa gaagttaaca aaaaacaagt  gtgctacaaa cacaatttca atgcaagctc agttctctgg tgttcaaaa ctgttgatgt  gtgtgttcac tttaaccaat ctgctaataa ttcagtttgg agcccatcta tgaagctgaa  tctgtgtcct ggggaaaaa tcacatgcca ggatccctga ataggtgtcg gagagccggg  gaaagtcac cagaagctat gccggttctc aaacttccc agcagccctg agagtcccat  tggcgggacc atcaacttaca aatgtgtagg ctccagttgg gaggagaaga gaaatgactg  catctctgcc ccaataaaaa gtctgttcca gatgcttaag gctttgatca agagccctc  tcaggatgag atgtctccta catacctgaa ggatctttct attagcatag acaaaegga  acatgaaatc agctcttctc ctgggagtct gggagccatt ataacatcc ttgatctgt  ctcaacagtt ccaacccaag taaattcaga aatgatgacg cactgtctct ctacggttaa  tgtcatcctt ggcaagccc tcttgaacac ctggaaggtt ttacaacagc aatggacca  tcagagtcca cagctactac attcagtga agattttcc caagcattac agtcaggaga  tagccctcct ttgtccttct ccaaaactaa tgtgcagatg agcagcacgg taatcaagtc  cagccaccaca gaaacctatc acagaggtt ttgtttccc tactttgacc tctggggcaa  tgtgttcatt gacaagagct atctagaaaa ctggcagtcg gattcgtcta ttgtaccat  ggctttccca actctccaa ccatccttgc tcaggatatc caggaaaaa actttgcaga  gagcttagtg atgacaacca ctgtcagcca caatcagct atgccattca ggatttcaat  gacttttaag acaaatagcc cttaaggcgg cgaacgaag ttgtcttctt ggaacttcag  gcttgccaac aacacagggg ggtgggacag cagtgggtgc tatgttgaag aagtgatgg  ggacaatgc acctgtatct gtgaccacct aacatcattc tccatcctca tgtccctga  ctcccatgat cctagtctc tcctgggaat actcctggat attatttctt atgttgggtt  ggcttttcc atcttgagct tggcagcctg tctagtgtg gaagctgtgg tgtggaaatc  ggtgaccaag aatcgactt cttatatgcg ccacacctgc atagtgaata tcgctgctc  cctctgggc gccaacact ggttcattgt ggtcgtgccc atccaggaca atcgctacat  actctgcaag acagcctgtg tggctgccac ctcttctc accttctct acccagcgt  cttctctgg atgctgacac tgggcctcat gctgttctat cgcctgggtt tcattctgca</p>	Homo sapiens
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406 19501 G Protein- Coupled Receptor KIAA0758 BAA34478.1 CCSQNVNWS KVEWKQEGKI NIPGTPETDI P Homo sapiens  
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410	22315	G Protein- Coupled Receptor GPR92/GPR93	NP_065133.1	Homo sapiens
411	22925	Latrophilin- 3	NM_015236	Homo sapiens

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Homo sapiens

412 22925 Latrophilin- NP\_056051.1  
 3  
 22925 Latrophilin- NP\_056051.1  
 3  
 TDDKICSDP AQMENIRCYL PDAYKIMSQR CNNRQCAV AGPDVFPDPC PGTYKYLEVQ

413	25359	G Protein- Coupled Receptor GPR34	NM_005300	<p>YECVPYKVEQ KVFELCPGLLK GYVQSEHLFE SDHQSGAWCK DPLQASDKIY YMPWTPPYRTD</p> <p>TLTEYSSKDD FIAGRPTTTY KLPHRVDGTG FVYDGALEFF NKERTRNIVK FDLRTRIKSG</p> <p>EAIIANANYH DTSPYRWGK SDIDLAVDEN GLWVIYATEQ NNGKIVISQL NPYTLRIEGT</p> <p>WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATGNKID YIYNTDQSKD SLVDVPPFNS</p> <p>YQYIAAVDYN PRDNLLYWN NYHVVKYSLD FGPLDSRSGQ AHGQVSYIS PPIHLDSLEL</p> <p>RPSVKDISTT GPLGMGSTTT STTLRTTTLT PRSTTPSPVS GRNRSTSTP SPAVEVLDDM</p> <p>TTHLPASSQ IPALEESCEA VEAREIMWFK TRQQAIAKQP CPAGTIGVST YLCLAPDGIW</p> <p>DPQGPDLUNC SSPWNHITQ KIKSGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG</p> <p>LLDVQLRLNT PGGKDSAARS LNKLOKRERS CRAYQAMVE TVNNLLQPOA LNAWRDLTTS</p> <p>DQLRAATMLL HTVEESAFVL ADNLLKTDIV RENTDNIKLE VARLSTEGNL EDLKFPENMG</p> <p>HGSTIQLSAN TLKQNGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSHVIVNSP</p> <p>VITAAINKEF SNKYVLADPV VETVKHIKQS EENFNPCSF WSYSKRTMTG YWSTQGCRL</p> <p>TNKTHTTCS CNHLTNFAVL MAHVEVKHSD AVHDLLEDVI TWVGILLSLV CLLICITFEF</p> <p>FFRGLQSDRN TIHKNLCISL FVAELLFLIG INRTDQPIAC AVEAALLHFF FLAFTWMFL</p> <p>EGVQLYIMLV EVFESEHSRR KYFYLVGGM PALIVAVSAA VDYSYGTDK VCWLRLDTYF</p> <p>IWSFIGPATL IIMLVIFLG IALYKMFHHT AILKPESGCL DNINYEDNR PFIKSWVIGAI</p> <p>ALLCLGLTW AFGIMYINES TVIMAYLFTI FNSLQGMFIF IFHCVLQKKV RKEYGKCLRT</p> <p>HCCSGKSTES SIGSGKTSGS RTPGRYSTGS QSRIRRMWMD TVRKQSESSF ITGDINSSAS</p> <p>LNREPYRETS MGVLNLIAYQ IGASEQCQGY KCHGYSTEW</p> <p>atgagaagtc ataccataac aatgacgaca acttcagtcg gcagctggcc ttactctcc A</p> <p>cacagaatgc gctttataac caatcatagc gaccaacgcg cacaaaactt ctccagcaaca</p> <p>ccaaatgta ctactgtcc catggtgaa aaattggtat ctactgtgtt aaccacatcc</p> <p>tactctgta tttctcgtt gggactggtt gggaacataa tcgcoctcta tgtattctg</p> <p>ggtattcacc gtaaaagaaa ttccattcaa atttatctac ttaacgtagc cattgcagac</p> <p>ctcctactca tcttctgctt cctttccga ataattatc atattaacca aaacaagtgg</p> <p>acactaggtg tgattctgtg caaggtgtgtg ggaacactgt tttatatgaa catgtacatt</p> <p>agcattattt tgcttggtt catcagtttg gatcgctata taaaataataa tcggtctata</p> <p>cagcaacgga aggcaataac aaccaaacaa agtatttatg tctgttgtat agtatggatg</p> <p>cttgctcttg gtgatttcct aactatgatt attttaacac ttaagaaagg aggcataat</p> <p>tcacaaatgt gtttccatta cagagataag cataacgcaa aaggagaagc catttttaac</p> <p>ttcattcttg tgtaaatgtt ctggctaatt ttcttactaa taatcctttc atataattaag</p> <p>attgggaaga atctattgag gatttctaaa aggaggtcaa aatttctaa ttctggtaaa</p> <p>tatgccacta cagctcgtaa ctcttttatt gtacttatca ttttactat atgttttgtt</p> <p>ccctatcatg ccttctgatt catctacatt tcttcacagc taaatgtatc atcttgctac</p> <p>tggaagaagaa ttgttcacaa aaccaatgag atcatgtgtg ttctctcatc ttccaatagt</p> <p>tgcttagatc cagtcagtga ttctctgatg tccagtaaca ttccgaaaaa aatgtgccaa</p> <p>cttcttttta gacgatttca aggtgaacca agtaggagtg aaagcacttc agaattttaa</p> <p>ccaggatact cctgcatga tacatctgtg gcagtgaaaa tacagtcag ttctaaaagt</p> <p>acttga</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITWT TSVSWPYSS HRMRFITNHS DQPPQNSAT PNVTCPMDE KLLSTVLTTTS P</p> <p>YSVIFIVGLV GNIILYVFL GIHKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

415	30698	Receptor GPR34	G Protein- Coupled Receptor Is30698	AX068267	<p>           TLGVILCKV GTLFYNNMYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVWM            LALGGFLTMI ILTLKKGHN STMCFHRYDK HNAKGEAIFN FILVVMFWLI FLIIILSYIK            IGKNLLRISK RRSKFPNSGK YATTARNSEI VLIIFICFV PYHAFRFIYI SSQNVSSCY            WKEIVHKTNE IMLVLSSFS CLDPVMYFLM SSNIRKIMCQ LLFRRFQGEF SRSESTSEFK            PGYSLHDTSV AVKIQSSSKS T            ttctcagat cggcttctcg caacaggcag tcagttctca ctggggccct tggactccca A            ttccaataat ggagaagaca gatacagcc actgaccagg gacctggga ggtgccacgt            gatgtgagg catcatgcta gggagctgag ctctgacctt cctgctgggt gatttccac            ctctgggctg ctagatctac ttccctggatg ccgtgaagat cctcatgtat gaaaatgaag            tccaaggcaa ccatgatttg ctgcttagtg ttctttctgt ccacagaatg ttcccactat            agatccaaga ttacacctaaa aagctatagt gaagtggcca accacatcct cgacacagca            gccatttcaa actgggcttt cattcccaac aaaaatgcca gctcggtatt gttgcagtca            gtgaatttgt ttggccagaca actccacatc cacaataatt ctgagaacat tgtgaatgaa            ctcttcattc agacaaaagg gtttcacatc aaccataata cctcagagaa aagcctcaat            ttctocatga gcatgaacaa taccacagaa gatactcttag gaatggtaca gattcccagg            caagagctaa ggaagctgtg gccaaatgca tccaagcca ttagcatagc ttcccacac            ttgggggcta tcttgagaga agccacttg caaatgtga gttctcccag acaggtaaat            ggtctggctc tatcagtggt ttaccagaa agttgcaag aaatcatact caccttcgaa            aagatcaata aaacccgcaa ttccagagcc cagtgtgttg gctggcact caagaaaagg            agatgggatg agaaagcgtg ccaaatgatg ttggatatca ggaacgaagt gaaatgocgc            tgtaactaca ccagtgtgtg gatgtcttt tccattctca tgctctccaa atcgatgacc            gacaaaagtc tggactacat cacctgcatt gggctcagcg tctcaatcct aagcttggtt            ctttgcctga tcaatgaagc cacagtgtgg tccgggtgg ttgtgacgga gatatacat            atggtcacg tgtgcatcgt gaatatagca gtgtcccttc tgactgcca tgtgtggtt            atcataggct ctcaacttaa cattaaaggcc caggactaca acatgtgtg tgcagtga            tttttcagcc acttttcta cctctctctg tttttctgga tgctcttcaa agcattgctc            atcatttatg gaatatgtgt cattttccgt aggatgatga agtcccgaat gatggtcatt            ggctttgcca ttggctatgg gtgccattg atcattgctg tcaactacagt tgctatcaca            gagccagaga acggctacat gagacctgag gctgttggc ttaactggga caataccaaa            gcccttttag catttgccat ccggcgcttc gctattgtgg ctgtaaatct gattgtggtt            ttggtgtgtg ctgtcaacac tcagaggccc tctattggca gtcccaagtc tcaggatgtg            gtcataatta tgaggatcag caaaaatgtt gccatcctca ctccactgct gggactgacc            tggggttttg gaatagccac tctcatagaa ggcacttctc tgactgtcca tataattttt            gccttgctca atgctttcca gggttttttc atctgtctgt ttggaacctat tatggatcac            aagataaagag atgctttgag gatgaggatg tcttcactga aggggaaatc gagggcagct            gagaatgcat cactaggccc aaccaatgga tctaaattaa tgaatcgtca aggatgaaat            gctgccccat ttctcatgga tgtcctgaga ccaagagggg agatccagga gaaagaggcc            atggaaaaga ggctggagtg agggaggaatg gtcattgctc cttgggaagac ttctcttct            tgtcaggagt gactcccaag ctcttggtcg gccgaagaaa aactgagat aacatttgc            gactgggctt taaggagcat gatttatgga cccttaacc taccgtgccc ctgcaagagg            ctggcttctt ggtcaatctt gactagatta agagtcaatc tgcaagccat ttatgtgtct         </p>	Homo sapiens
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301/448

416 30698 G Protein-  
Coupled  
Receptor  
Ls30698 CAC27252.1 Homo sapiens

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QG

417 30875 G Protein-  
Coupled  
Receptor  
GPR87/GPR95 NM\_023915 Homo sapiens

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418	30875	G Protein- Coupled Receptor GPR87/GPR95	NP_076404.1	gtgtaggcct tttattgttt gttggaatcg atatgtacaa agtgtaaata aatgtttctt ttcattatcc ttaaaaaaa aa GLAVWIFFIH RNKTSFIFYL KNIVVADLIM TLTFPFRIVH DAGFGPWYFK FILCRYTSVL FYANMYTSIV FLGLISIDRY LKWKVPFGDS RMYSIITTKV LSVCVWVIMA VLSLPNIILT NGQPTEDNIH QCSKLKSPGL VKWHTAVTYV NSCLFVAVLV ILIGYIAIS RYHKSSRQF ISQSSRRKXH NQSIKRVWVAV FFCFLPLPYHL CRIPFTSHL DRLDESAQK ILYYCKEITL FLSACNVCLD PIIYFMCRS FSRRLFKKSN IRTSEIRS LQSVRRSEVR IYYDYTDV ggccttatct ttccagtcgt ccagctgact cgtgccaccc cagcccgagg tgcactgacc A atgagcctca actcctccct cagctgcagg aaggagctga gtaattctcac tgaggaggag ggtggcgaag ggggctgcat catcacccag ttcactgccca tcaattgtcat caccattttt gtctgctctgg gaaacctggt catcgtggtc acctgtaca agaagtccta cctcctcacc ctcagcaaca agttcgtctt cagcctgact ctgtccaact tctgctgtc cgtgttggtg ctgccttttg tggtagcagg ctccatccgc agggaatgga tctttggtg agtgtggtgc aacttctctg cctcctcta cctgctgact agctctgcca gcattgctaac cctcggggtc atggccatcg accgctacta tgcgtgctctg taccceatgg tgtaccccat gaagatcaca gggaaccggg ctgtgatggc actgtgtctac atctggcttc actcgtctcat cggctgcctg ccaccctgt ttggttggtc atccgtggag tttagcagat tcaaatggat gtgtgtggtc gcttgccacc gggagcctgg ctacacggcc ttctggcaga ttggtgtgct cctcttcccc ttcttggtca tctgtggtgt ctatggcttc atcttccgct tggccagggt caaggcaccg aaggtgcact gtggcacagt cgtcatcgtg gaggagatg ctccagaggac cgggaggaaag aactccagca cctccacctc ctcttcaggc agcaggagga atgcctttca ggggtggtc tactggcca accagtgcga agccctcacc accatcctgg tggctcctcg tgccttcctg gtcacctggg gccctacat ggttgtcacc gccctgagg gccctgggg gaaaagctcc gtctccccga gccctggagac ttggggccaca tggctgtcct ttgccagcgc tgtctgccac ccccgatct atggactctg gaacaagaca gtctgcgcaa aactactggg catgtgcttt ggggaccgggt attatcggga accatttgtg caacgacaga ggacttccag gctcttcagg atttccaaca gcatcacaga cctgggacctg tccccacacc tcaactgcgt catggcagggt ggacagcccc tggggcacag cagcagcagc ggggacactg gcttcagctg ctcccaggac tcaggtaacc tgcgtgcttt ataagcctct cactgtcgc gtttccccg tgttgcggtt cccccgctc gcgtttcccc tgtgcaggct caagagctgg cggagggggca tttccccagg tg	Homo sapiens
419	31568	G Protein- Coupled Receptor RE2	NM_007369	MSLNSLSLSCR KEISNLTEEE GEGGVITQ FIAIVITIF VCLGNLVIVV TLYKKSYLIT P LSNKFVFSLT LSNFLLSLV LPFVVTSSIR REWIFGVWVC NFSALLYLLI SSASMLTLGV IAIDRYAVLV YPVVPMKIT GNRAVMALVY IWLHSLIGCL PLFLGWSVSE FDEFKMCVA AWHREPGYTA FWOIWCALFP FLVMLVCYGF IFRVARVKAR KVHCGTVIV EEDAQRTGK NSSTSTSSG SRNFAQGVV YSANQCKALI TILVVLGAFM VTWGPYMWVI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLMNKT VRKELGMCVF GDRYYREFV QRQTSRLFS ISNRITDLGL SPHILTALMAG GQPLGHSST GDTFSCSQD SGNLRAL atggacacct cccggctcgg tgtgtcctctg tcttgctctg tctgtctgca gctggcgacc A gggggcagct ctcccaggctc tgggtgtgtg ctgagggggct gccccacaca ctgtcattgc	Homo sapiens
420	31568	G Protein- Coupled Receptor RE2	NP_031395.1	MSLNSLSLSCR KEISNLTEEE GEGGVITQ FIAIVITIF VCLGNLVIVV TLYKKSYLIT P LSNKFVFSLT LSNFLLSLV LPFVVTSSIR REWIFGVWVC NFSALLYLLI SSASMLTLGV IAIDRYAVLV YPVVPMKIT GNRAVMALVY IWLHSLIGCL PLFLGWSVSE FDEFKMCVA AWHREPGYTA FWOIWCALFP FLVMLVCYGF IFRVARVKAR KVHCGTVIV EEDAQRTGK NSSTSTSSG SRNFAQGVV YSANQCKALI TILVVLGAFM VTWGPYMWVI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLMNKT VRKELGMCVF GDRYYREFV QRQTSRLFS ISNRITDLGL SPHILTALMAG GQPLGHSST GDTFSCSQD SGNLRAL atggacacct cccggctcgg tgtgtcctctg tcttgctctg tctgtctgca gctggcgacc A gggggcagct ctcccaggctc tgggtgtgtg ctgagggggct gccccacaca ctgtcattgc	Homo sapiens
421	36534	G Protein- Coupled	NM_003667	MSLNSLSLSCR KEISNLTEEE GEGGVITQ FIAIVITIF VCLGNLVIVV TLYKKSYLIT P LSNKFVFSLT LSNFLLSLV LPFVVTSSIR REWIFGVWVC NFSALLYLLI SSASMLTLGV IAIDRYAVLV YPVVPMKIT GNRAVMALVY IWLHSLIGCL PLFLGWSVSE FDEFKMCVA AWHREPGYTA FWOIWCALFP FLVMLVCYGF IFRVARVKAR KVHCGTVIV EEDAQRTGK NSSTSTSSG SRNFAQGVV YSANQCKALI TILVVLGAFM VTWGPYMWVI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLMNKT VRKELGMCVF GDRYYREFV QRQTSRLFS ISNRITDLGL SPHILTALMAG GQPLGHSST GDTFSCSQD SGNLRAL atggacacct cccggctcgg tgtgtcctctg tcttgctctg tctgtctgca gctggcgacc A gggggcagct ctcccaggctc tgggtgtgtg ctgagggggct gccccacaca ctgtcattgc	Homo sapiens

Receptor  
GPR49

gagcccgacg gcaggatggt gctcaggggtg gactgctccg acctgggggt acctggagctg  
ccttccaac ttaggtctt cactccctac cttagactca gtatgaacaa catcagtcag  
ctgctccga atccctgccc cagtctccgc ttcttgagg agttacgtct tgcgggaaac  
gctctgacat acattcccaa gggagcattc actggccttt acagtcttaa agttcttatg  
ctgcagata atcagctaag acacgtaccc acagaagctc tgcagaattt gcgaagcctt  
caatccctgc gtctggatgc taaccacatc agctatgtgc ccccaagctg ttctcagtgcc  
ctgcattccc ttaggcacct gtggctggat gacaaatcgt taacagaaat cccggtccag  
gcttttagaa gtttatccgc attgcaagcc atgaccttgg cctgaacaa aatacaccac  
ataccagact atgcttttgg aaacctctcc agcttgtag ttctacatct ccataacaat  
agaatccact ccttgggaaa gaaatgcttt gatggctcc acagcctaga gacttttagat  
ttaaattaca ataaccttga tgaattcccc actgcaatta ggacactctc caaccttaaa  
gaactaggat ttcatagcaa caatatcagg tcgatacctg agaaagcatt ttagggcaac  
ccttctctta ttacaataca ttcttatgac aatcccatcc aattgttgg gagatctgct  
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tttccctgatt taactggaac tgcacacctg gagagtctga ctttaactgg agcacagatc  
tcattctctc ctcaaacctg ctgcaatcag ttacctaatc tccaagtgtc agatctgtct  
tacaacctat tagaagattt acccagtttt tcagtctgcc aaaagcttca gaaaattgac  
ctaagacata atgaatcta cgaattaaa gttagcactt tccagcagtt gcttagcctc  
cgatcgctga atttggttg gaacaaaatt gctattatct acccaaatgc atttccact  
ttgccatccc taataaagct ggacctatgc tccaactcc tgtcgtcttt tctataact  
gggttacatg gtttaactca cttaaaatta acaggaaatc atgccttaca gagcttgata  
tcactgaaa actttccaga actcaagggt atagaaatgc cttatgctta ccagtgtgtg  
gcatttggag tgtgtgagaa tgcctataag atttctaac aatggaataa aggtgacaac  
agcagtatgg acgaccttca taagaaaagt gctggaatgt ttcaggctca agatgaacgt  
gaccttgaag atttctgct tgaactttgag gaagacctga aagcccttca ttcagtgcag  
tgttccactt cccagggccc cttcaaaccc tgtgaacacc tgccttgatgg ctggctgac  
agaattggag tgtggacct agcagttctg gcactactt gtaatgcttt ggtgacttca  
acagttttca gatccctct gtacatttcc cccattaaac tgttaattgg ggtcatcgca  
gcagtgaaca tgcctacggg agtctccagt gccgtgctgg ctggtgttga tgcgttcaact  
tttggcagct ttgcacgaca tgggtcctgg tgggagaatg ggttgggtt ccattgctatt  
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gagcgtgggt tctctgtgaa atattctgca aaattgaaa cgaagctcc atttctagc  
ctgaaagtaa tcaattttgt ctgtgcccgt ctggccttga ccatggccgc agttccctg  
ctgggtggca gcaagtatgg cgcctccctc ctctgcctgc ctttgccttt tggggagccc  
agcaccatgg gctacatggt cgctctcatc ttgtcfaat ccttttgcct cctcatgatg  
accattgcct acaccaagct ctactgcaat ttggacaagg gagacctgga gaattttgg  
gactgctcta tggtaaaaaa cattgcccctg ttgctcttca ccaactgcat cctaaactgc  
cctgtggctt tcttgcctt ctccctctta ataaacctta ctttatcag tcttgaagta  
attaagtta tcttctggt ggtagtccca ctctctgcat gtctcaatcc ccttctctac  
atcttgttca atcctcact taaggaggat ctgttgagcc ttggaagca aacctacgtc  
tggacaagat caaacaccc aagcttgatg tcaattaaact ctgatgatg cgaataacag

422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p>tcctgtgact caactcaagc cttggttaacc ttaccagct ccagcatcac ttatgacctg  cctccagtt cctgtccatc accagcttat ccagtgactg agagctgcca tcttctctct  gtggcatttg tccatgtct ctaa</p> <p>PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVLIM  LQNNQLRHVP TEALQNLRSI QSLRLDANHI SYVPPSCFSG LHSRLRLWLD DNALTEIPVQ  AFRSLSALQA MTALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSIGKKCF DGLHSLETLD  LYNNNLDEFP TAITLSNLK ELGFHSNNIR SIPEKAFVGN PSLTIHFYD NPIQFVGRSA  FQHLPELRTL TLNGASQITE FPDLTGTANL ESLLTGAQI SSLPQTVCNQ LPNLQVLDSL  YNLLEDLPF SVCOKLQKID LRHNEIYEIK VDTFQQLLSL RSLNLAWNKI AIIHPNAFST  LPSLIKLDSL SNLSSFPIT GLHGLTHLKL TGNHALQSLI SSENFPPELV IEMPYAYQCC  AFGVCENAYK ISNQWNKGDN SSMDDLHKKD AGMFQADDER DLEDFLLDFE EDLKALHSVQ  CSPSPGPFKP CEHLIDGWL I RIGWTIAVL ALTCNALVTS TVFRSPLYIS PIKLLIGVIA  AVNMLTGVSS AVLAGVDAFT FGSFARHGAW WENGVGCHVI GFLSIFASES SVFLLTLAAL  ERGFVSKYSA KFETKAPFSS LKVIILLCAL LALTMAAVPL LGGSKYGASP ICLPLPFGEF  STMGYMVALI LNLISLCFLMM TIAYTKLYCN LDKGDLNLIW DCSMWKHAL LLFTNCILNC  PVAFLSFSSL INLTFFISPEV IKFILLVVVP LPACLNPLLY ILFNPHFKED LVSLRKQTYV  WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSTYIDL PPSSVPSPAY PVTESCHLSS  VAFVPCIL</p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NM_004736	<p>actagagatg gcgggcgggc tgctctgaag agacctcgcc gcggcgaggag gaggagagaa A  gcgcagcgc gcgcgcgcgc gggggcccatg tcggagtcgc tgttgccgcc  gccgcctgta gctgctggac ccgagtgga gtagagggga aacggcagga tgaagtcgc  cgagacccct tcgcgcgaca tcactccgga gtggaggaag caatacatcc agtatgagcc  tttcaaggat atgctgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga  ggacacagta agagaggatt ttgccaaagt tgaagagaag tttttccaaa cctgtgaaaa  agaaactgcc aaaaatcaaca cattttattc agagaagctc gcagaggctc agcgagggtt  tgctacactt cagaatgagc ttcagtcac actggatgca cagaaaagaa gcactgggtg  tactacgctg cgacaacgca gaaagccagt cttccacttg tccatgagg aacgtgtcca  acatagaaat attaaagacc ttaaaactggc cttcagtgag ttctacctca gtctaactct  gctgcagaac tatcagaatc tgaattttac agggtttcga aaaatccctga aaaagcatga  caagatcctg gaaacatctc gtggagcaga ttggcgagtg gctcacgtag aggtggcccc  atthtataca tgcaagaaaa tcaaccagct tatctctgaa actgaggctg tagtgaccaa  tgaacttgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc cccctttggg  agctgctcag cctgcaccag catggactac ttttagagtt ggctattttt gtggaattt  cattgtactg aatattaccc ttgtgcttgc cgtgtattt aaacttgaaa cagatagaag  tatatggccc ttgataagaa tctatcgggg ttgctttctt ctgattgaat tctttttct  actgggcatc aacacgtatg gtggagaca ggctggagta aacctgtac tcatcttga  acttaatccg agaagcaatt tgtctcatca acatctctt gagattgctg gattcctcgg  gatattgtgg tgcctgagcc ttctggcatg cttctttgct ccaattagtg tcatccccc  atatgtgat ccacttgccc ttatggatt tatgttttc tctctatga accccacaa  aactttctac tataaatccc ggtttttggt gcttaaacctg ctgtttcag tatttaacagc</p>	Homo sapiens



424	37498	Xenotropic and Polytropic Retrovirus Receptor (XPRI)	NP_004727.1	<p>ccccctccat aaggtaggct ttgctgattt ctggctggcg gatcagctga acagcctgtc  agtgatactg atggacctgg aatatatgat ctgcttttac agtttggagc tcaaatggga  tgaagtaag ggcctgttgc caataatcc agaagaatca ggaatttgcc acaaatatac  atatgtgtg cgggccattg ttcagtgcac tccctcattt gtaaatgctg gcaagtactc  gcgccatat cgagacacaa aaaggccctt tccctcattt gtaaatgctg gcaagtactc  cacaacttc ttcattgttg cggttgagc cctttacagc actcacaag aacgaggtoa  ctcgacact atggtgttct ttacactgtg ggtgtcttcc tatacatca gttcctgcta  taccctcatc tgggacttca agatggactg ggtgtcttcc tatacatca gttcctgcta  cacttctctc cgggaagaga ttgtataccc ccaaaaagcc tactactact gtgccataat  agaggatgtg attctgcgtc ttgcttgagc tatccaatc tgcattaccc ctacaacttt  gtgcctcat tctggggaca tcatgtctac tgccttgcc ccacttgagg ttttccggcg  attgtgtgg aactcttcc gctggagaa tgaacatctg aataactgtg gtgaattccg  tgctgtgcgg gacatctctg tggcccccct gaacgcagat gatcagactc tctagaaca  gatgatggac caggatgatg gggtagcagaa ccgccaagag aatcggtcat ggaagtacaa  ccagagcata tccctgcgc cgcctgcctt cgcttctcaa tccaaggctc gtgacactaa  ggtattgata gaagacacag atgatgaagc taacacttga attttctgaa gtctagctta  acatccttgg ttttctact ctacaatcct ttccctgacc aacgcaacct ctagtacctt  tcagccgaa aacaggagaa aacacataac acatttccg agctcttccg gatcggatcc  tatggactcc aacaagctc actgtgttcc ttttcttctc tctgtgttca attttaattt  tctattttca aacaagtat ttacttcatt tggcaatcag aggatgtttt aagaaacaaa  acatagtatc ttatggattg tttaacaatc caaggacata gataacctatc aggatgaaga  acaggcattg caaggaccct ctgatggac ggtactgaga tatctcggct tccgctcagc  ccggttttga atggttgaac ccggacattg gtttttaaat ttttgtcag tttatgtgga  gaattttttt ctctcttca taccagcgc aaagccactg gccgacttg caggaaaagt  gcaacttaaa gcagtacctt cattcatgaa gctacttttt aatttgatgt aacttttctt  attttgggaa ggtgtgctg gtgggtggga aatatgatgt atttgttaca catagttttc  tcattattta tgaacttaa ccatacagaa tgataatact cctgtgcaat gaagtgata  acagtaaaag aagcaggag aaaaaaa</p>	Homo sapiens
				<p>SAQDQAPSVE VTDEDTVKRY FAKFEKFFQ P  TCEKELAKIN TFESEKLAEE QRFATLQNE LQSSLDQKE STGVTTLRQR RKPVHLSHE  ERVQHRNIKD LKLAFFSEFYI SLILLQNYQN LNFTGFRKIL KKHDKILETS RGADWRVAHV  EVAPFYTCCK INQLISETEA VVTNELEDGD RQKAMKRLRV PPLGAAQAPAWTTFRVGLF  CGIFIVLNT LVLAAVFKLE TDRSIWPLIR IYRGGFLLIE FLFLIGINTY GWRQAGVNHV  LIFELNPRSN LSHOHLFEIA GFLGILWCLS LLACFFAPIS VIPTYVYPLA LYGFVFFLI  NPTKTFYYS RFWLKLFLER VFTAPFHKVG FADFWLADQL NLSVLIMDL EYMICFYSLE  LKWDESKGLL PNNSESGIC HKYTYGVRAI VQCIPIAWIRF IQCLRRYRDT KRAFPHLVNA  GKYSTTFMW AFAALYSTHK ERGHSMTWVF FYLWIVFYII SSCYTLIWDL KMDWGLFDKN  AGENTFLREE IVYQKAYY CAIIEDVILR FAWTIQISIT STTLPHSGD IATVFAPE  VFRFVWNFF RLENEHLNCC GEFRVVRDIS VAPLNADDQT LLEQMDQDD GVRNRQKNRS  WKYNQISISLR RPLASQSKA RDTKVLIEDT DDEANT</p>	

425	40881	Lung Seven Transmembran e Receptor 2 (LUSTER2)	AX073578	agagatggca gtgagcgaga ggaggggggct cggcgcgcgg agccccgcgg agtgggggca A gcggctactt ctggtgctgc tgttgggtgg ctgctccggg cgcaccacc ggctggcgct gacgggggag aagcgagcgg acatccagct gaacagcttc ggtttctaca ccaatggctc tctggaggtg gagttagctg tctgctggct gggcctcggg gaggcagaag agaagtcctt gctgggtggg ttcagtcctc gccgggttcg gctgggaga gttcgtcctt attcaaccgg ggatttccag gactgctcct tccagaaaaa cagtagcagt ttctgtgtcc tgttctctcat caacaccaag gatctgcagg tccaggtgcg gaagtatgga gacgagaaga cgttgtttat ctttcccggg ctctcccggg aagcaccctc caaaccaagg ctcgcgaagc cacaggccac agtccccgc aaggtggatg gcggaggagc ctctgcagcc agcaagccca agtcaacacc cgagtgatt cagggtccta gtgggaagga caaggacctg gtgttgggct tgagccacct caacaactcc tacaacttca gtttccacct ggtgatcggc tctcaggcgg aagaaggcca gtacagcctg aacttccaca actgcaacaa ttcatgtcca ggaaggagc atccattcga catcacggtg atgatccggg agaagaacct cgatggcttc ctgtcggcag cggagatgcc ccttttcaag ctctacatgg tcatgtccgc ctgttctctg gccgttgga tcttctgggt gtccatcttc tgcaggaaca cgtacagcgt ctccaagatc cactggctca tggcggcctt ggccttcaac aagagcatct ctctctctt ccacagcatc aactactact tcatcaacag ccagggccac ccatcgaaag gccttgcctg catgtactac atgcacacc tgtgaaggg cgccctctc ttcatacaca tgcctctgat tggctcaggc tggccttca tcaagtacgt cctgtcggat aaggagaaga aggtctttgg gatcgtgat cccatgcagg tccgtgccaa cgtggcctac atcatcatcg agtcccgcca ggaaggcgcc agcgactacg tgctgtggaa ggagattttg ttcctgggtg acctatctg ctgtgtgtgc atctgttcc ccgtagtctg gtccatccgg catctccagg atgcgtctgg cacagacggg aaggtggcag tgaacctggc caagctgaag ctgttccggc attactatgt catgtcatc tgtacgtct acttcaccg catcatgcc atcctgctgc aggtggctgt gcccttccag tggcagtggc tgtaccagct cttgggtggg ggtccaccct tggccttctt cgtgtctcag ggtacaagt tccagccacc aggaacaac cgtacactgc agctgcccc aagagacgag gaggatgttc agatggagca agtaatgacg gactctgggt tccgggaagg cctctccaaa gtcaacaaa cagccagcgg gcggaactg ttatgatcac ctccacatct cagacaaaag ggtcgtcctc cccagcatt tctcactcct gcccttcttc cacagcgtat gtggggaggt ggagggggtc catgtggacc agggcccccag ctccccggga ccccggttcc cggacaagcc catttggaag aagatccct tctcccccc aaatattggg cagccctgtc cttaaccccg gaccacctt ccttccagc tatgtgtaca ataatgacca atctgtttgg ct	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (LUSTER2)	CAC28410.1	MAVSERRGLG RGSPAEWGQR LLLVLLGGC SGRHRLALT GEKRAIQLN SFGFTNGSL P EVELSVLRIG LREAEEKSL VGFSLSRVRS GRVRSYSTRD FQDCPLQKNS SSFLVLEFLN TKDLQVQVRK YGEQKTLFTF PGLLPEAPSK PGLPKPQATV PRKVDGGGTS AASKPKSTPA VIQFSGKDK DLVLGLSHLN NSYNFSFHVV IGSQAEEGQY SLNFHNCNNS VPGKEHPFDI TVMIREKNPD GFLSAEMPL FKLYMVMSAC FLAAGIFKWS ILCRNTYSVF KIHWMALALA FTKISLILFH SINYIFINSQ GHPIEGLAM YYIAHLKGA LLFITIALIG SGWAFIKYVL SDKEKVFGE VIPMQVLAV AYIIIESREE GASDYLWKE ILFLVDLIC GAILFPVWS IRHLQDASGT DGKAVNLAK LKLFRIHYVM VICVVFTRI IAILLQVAVP FQWQWLYQLL VEGSTLAFFV LTGYKFQPTG NNPLYQLPQE DEEDVQMEQV MTDSGFREGI SKVNTASGR	Homo sapiens

427	42697	G Protein- Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
				agccagcccg aggaagcgag cggcagggtgt gcacagaggt tctcaacttt gttttctgaa A	
				ctcgcgggtca ggatggtttt ctctgtcagg cagtgtggcc atgttggcag aactgaagaa	
				gttttactga cggtcaagat attccttctc atcatttctc ttcattgtct tctgtgtcgt tctggtaaca	
				tccctggag aagatactga taattccagt ttgtcaccac caccgtgctaa attatctgtt	
				gtcagttttg cccctcctc caatgagggt gaaacaacaa gcctcaatga tgttacttta	
				agcttactcc ttcaaacga aacagaaaaa actaaatc ctatagtaaa aaccttcaat	
				gcttcaggcg tcaaacccca gagaaatctc tgcaatttgt catctatttg caatgactca	
				gcatttttta gaggtgagat catgttttcaa tatgataaag aagcacctgt tcccagaat	
				caacatataa cgaatggcac cttaactgga gtccgtgtctc taagtgaatt aaaacgtca	
				gagctcaaca aaacctgca aacctaaagt gagacttact ttataatgtg tgctacagca	
				gaggcccaaa gcacattaaa ttgtacattc acaataaac tgaataatc aatgaatgca	
				tgtgtgcaa tagcgcgttt ggaaagagta aagattcgac caatggaaca ctgctgtctg	
				tctgtcagga taccctgccc ttctctccca gaagagtttg gaaagcttca gtgtgacctg	
				caggatccca ttgtctgtct tgctgacctc ccacgtggcc caccattttc ttccagccaa	
				tccatcccg ttgtgcctcg ggccactgtg ctttccagg tcccaaaag tacctctttt	
				gctgagctc cagattattc acctgtgacc cacaatgttc cctctccaat aggggagatt	
				caacctctt caccocagcc ttcagctccc atagcttcca gccctgccat tgacatgcc	
				ccacagtctg aacgatctc ttcccctatg ccccaaaccc atgtctccg caccacacct	
				cctgtgaaag cctcatattc ctctcccacc gtgtctgccc ctcggaatgt caacatacc	
				agcgcacctc ctgtccagac agacatctgc aacaccagca gtatttctga tcttgagaac	
				caagtgttc agatggagaa ggctctgtcc ttgggcagcc tggagcctaa cctcgcagga	
				gaaatgatca accaagtcag cagactcctt cattcccgc ctgacatgct ggcccctctg	
				gctcaagat tctgaaaagt agtggatgac attggcctac agctgaactt ttcaaacacg	
				actataagtc taacctccc ttctttggct ctggctgtga tcagagtga tgccagtagt	
				ttcaaacaca ctacctttgt ggcccaagac cctgcaaatc ttcagggttc tctggaacc	
				caagctcctg agaacagtat tggcacaatt actcttctt catcgtgat gaataattta	
				ccagctcatg acatggagct agctccagg gtccagttca attttttga aacacctgct	
				ttgtttcagg atccttccct ggagaaacctc tctctgatca gctacgtcat atcatcgagt	
				gttgcaaac tgaccgtcag gaacttgaca agaaacgtga cagtacacatt aaagcacatc	
				aacccgagcc aggatgagt aacagtga tgtgtatttt gggaacttggg cagaaaatggt	
				ggcagaggag gctggtcaga caatggctgc tctgtcaaa acaggagatt gaatgaacc	
				atctgtacct gttagccatct aacaagcttc gggttctgc tggacctatc taggacatct	
				gtgctgctg ctcaaatgat ggctctgacg ttcatcacat atattgtgtg tgggcttca	
				tcaatttttc tgtcagtgac tcttgaacc tacatagctt ttgaaaaagat ccggaggagt	
				tacctctcca aaatcctcat ccagctgtgt gctgctctgc ttctgctgaa cctggtcttc	
				ctcctggact cgtggattgc tctgtataag atgcaaggcc tctgcatctc agtggctgta	
				tttcttcatt attttctctt ggtctcattc acatggatgg gctagaagc attccatatg	
				tacctggccc ttgtcaaaagt atttaatact tacatccgaa aatacatcct taaattctgc	
				attgtcggtt ggggggtacc agctgtgtgt gtgaccatca tctgactat atcccagat	

428	NP_005747.1	G Protein-Coupled	42697	NP_005747.1	MVFSVRQCGH VGRTEEVLLT FKIFLVICL HVVLVTSLEE DTDNSSLSP	PAKLSVVSPA P	Homo sapiens
					PSSNEVETTS INDVTLSLP SNETEXTKIT IVKTFNASGV KPQRNICNLS SICNDSAFRR		
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					atcaacaaca atgcagtatt ctacattacg gtgggtggga atttctgtgt gatatttttg		
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432	50847	Neurotensin Receptor type 2	NP_036476.1	PSSNPGLSLD ARLGVDTRLW AKVLFTALYA LIWALGAAGN ALSVHVWLKA P	Homo sapiens
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437	55728	ETL protein	NM_022159	<p>MASPRRSGQP GRPPPPPPPP APLLLLLLLP LLLPLAPGAW GWARGAPRPP PSSPPLSIMG P  IMPLTKEVAK GSIGRGVLP VELAIEQIRN ESLLRPVFLD LRLYTECDN AKGLKAFYDA  IKYGNHLMV FGVCPSPVTS IIAESLQGNV LVQLSFAATT PVLADKKYP YFFRTVPSDN  AVNPAILKLL KHYQWKRVGT LTQDVQRFSE VRNDLTGVLY GEDIEISDTE SFSNDPCTSV  KKLKGNDVRI ILGQFDQDMA AKVFCCAYEE NMYGSKYQWI IPGWYEPSWW EQVHTEANSS  RCLRKNLLAA MEGYIGVDFE PLSSKQIKTI SKTPQOYER EYNNKRSVG PSKFHGYAYD  GIWVIKTLQ RAMETLHASS RHQRIQDFNY TDHTLGRILL NAMNETNFFG VTGQVFRNG  ERMGTIKFTQ FQDSREVKVG EYNAVADTLE IINDTIRFQG SEPPKDKTII LEQLRKISLP  LYSILSALTI LGMIMASAFI FFKNNRQK LIKSSPYMN NLIIGGMLS YASIFLFGLD  GSFVSEKTFE TLCTVTRTWIL TVGYTTAFGA MEKWTWRVHA IFKNVMMKKK IIKDQKLLVI  VGGMLLIDLC ILICWQAVDP LRRTVEKYSM EPDPAGRDIS IRPLEHCEN THMTIWLIV  YAYKGLMLF GCFLAWETRN VSIPALNDSK YIGMSVYVNG IMCIIGAASV FLTRDQPNVQ  FCIVALVIF CSTITLCLVF VPKLITLRN PDAATONRRF QFTQNKQKED SKTSTSSTVS  NQASTSRLEG LQSENHRLM KITELDKDLE EVTMQLQDTP EKTYYIKQNH YQELNDILNL  GNFTESTDGG KAILKNHLDQ NPQLQWNTE PSRTCKDPIE DINSPHEIQR RLSLQLPILH  HAYLPSIGGV DASCVSFPCS PTASPRHRHV PPSFRVMVSG L</p>	Homo sapiens
437	55728	ETL protein	NM_022159	<p>gtgaaattta aactccagtc ctgtggcgaa aatgctaatt gcactaacac agaaggaagt A  tattattgta tgtgtgtacc tggcttcaga tccagcagta accaagacag gtttatcact  aatgatggaa cegtctgtat agaaaatgtg aatgcaaaact gccatttaga taatgtctgt  atagctgcaa atattaataa aactttaaca aaaatcagat ccataaaaga acctgtggct  ttgtacaag agtctatag aaattctgtg acagatcttt caccacaga tataattaca  tatatagaat tattagtga atcatcttca ttagtaggtt acaagaacaa cactatctca  gccaaggaca ccttttctaa ctcaactctt actgaatttg taaaaacctg gaataatttt  gttcaagggt atacatttgt agttgggac agttatctg tgaatcatag gagaacacat  cttcaaaac tcatgcacac tgttgaacaa gctactttaa ggatattcca gagcttccaa  aagaccacag agtttgatag aaattcaacg gatatagtc tcaaaagttt ctttttgat  tcataaaca tgaacatat tcatctcat atgaatatgg atggagacta cataaatata  tttccaaaaga gaaaagctgc atagtattca aatggcaatg ttgcagttgc atttttatat  tataagagta ttggtccttt gctttcatca tctgacaact tcttattgaa acctcaaaat  tatgataatt ctgaagagga ggaagagtc atatcttcag taatttcagt ctcaatgagc  tcaaacccac ccacattata tgaacttgaa aaaataacat ttacattaaag tcatcgaag  gtcacagata ggtataggag tctatgtgca ttttggaatt actcacctga taccatgaat  ggcagctggt cttcagaggg ctgtgagctg acatactcaa atgagaccca cacctcatgc  cgctgtaac acctgacaca ttttgcaatt ttgatgtcct ctggtccttc cattggtatt</p>	Homo sapiens

438	55728	ETL protein	NP_071442.1	MCVPGFRSSS NQDRFITNDG TVCIENVNAN CHLDNVICIAA NINKTLTKIR SIKEPVALLQ P EVYRNSVTDL SPTDIITYIE ILAESSLLG YKNNTISAKD TLSNSTLTFE VKTVNMFVQR DTFVWWDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDNSTDIA LKVFFFDSYN MKHIHPHMNM DGDYINIFPK RKAAYDSNGN VAVAFLYKS IGPLISSSDN FLLKPQNYDN SEEEERVISS VISVSMSSNP PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTMNGSW SSEGCETYS NETHTSCRCN HLTHEFILMS SGPSIGIKDY NILTRITQLG IISLICLAI CIFTWFEESE IQSTRTHHK NLCCSLFLAE LVFLVGINTN TNKLFCISIIA GLLHYFFFLAA FAWMCIEGIIH LYLIUVGVIIY NKGFHLKNEY IFGYLSPAVV VGESAALGYR YYGTTKVCWL STENNFWSF IGPACLIILV NLLAFGVIIY KVFRHTAGLK PEVSCFENIR SCARGALALI FLLGTTWIFG VLHVVASV TAYLFTVSNA FQGMFIFLFL CVLSRKIQEE YYRLFKNVPC CFGCLR	Homo sapiens
439	56923	Muscarinic acetylcholin e Receptor M3	NM_000740	atgaccttgc acaataacag tacaacctcg cctttgtttc caaacatcag ctctctctgg A atacacagcc cctccgatgc agggctgccc ccgggaaccg tcaactattt cggcagctac aatgtttctc gagcagctgg caatttctcc tctccgacg gtaccaccca tgaccctctg ggagggtcata ccgtctggca agtgggtctc atcgcttctc taacggggcat cctggccttg gtgaccatca tcggcaacat cctggtaatt gtgtcattta aggtcaacaa gcagctgaag	Homo sapiens

440	56923	Muscarinic acetylcholin e Receptor M3	NP_000731.1	<p>acggtcaaca actacttctt ctttaagcctg gcctgtgccc atctgattat cggggtcatt tcaatgaatc tgtttaogac ctacatcatc atgaatcgat gggccctagg gaacttgcc tgtgacctct ggcttgocat tgactacgta gccagcaatg cctctgttat gaactttctg gtcatcagct ttgacagata cttttccatc acgagccgc tcacgtaccg agccaacga acaacaaaga gagecgtgtg gatgatcggg ctggccttggg tcattcctt tgcctttgg gtccttgcca tcttgttctg gcaatacttt gttggaaaga gaactgtgcc tccgggagag tgtttcattc agttcctcag tgagcccacc attacttttg gcacagccat cgctgctttt tatatgctg tcaccattat gactatttta tactggagga tctataagga aactgaaaag cgtaccaaaag agcttgctgg cctgcaagcc tctgggacag aggcagagac agaaaactt gtccacccca cgggcagttc tgaagcgtgc agcagttacg aacttaaca gcaagcatg aaacgctcca acagaggaa gtagggccgc tgccacttct gttcacaac caagagctgg aaacccagct ccgagcagat ggaccaagac cacagcagca gtgacagttg gaacaacaat gatgtgctg cctccctgga gaactccgac tctccgagc agggagcat tggtccgag acgagagcca tctactccat cgtgctcaag cttccgggtc acagacccat cctcaactcc accaagtac cctcatcgga caactcgag gtgctgagg aggagctggg gatggtggac ttggagagga aagccgacaa gctgcaggcc cagaagagcg tggacgatgg aggcagtttt cctcaaaagct tctccaaagt tcccatccag cttagagtcag ccgtggacac agtaagact tctgacgtca actcctcagt ggttaagagc acggccactc tacctctgtc cttcaaggaa gccactctgg ccaagaggtt tgcctctgaag accagaagtc agatcactaa gcgaaaaag atgtccctgg tcaagagaga gaaagcggcc cagaccctca gtgcgatctt gctgcttc atcatcactt ggaccccata caacatcatg gttctgtgta acacttttg tgacagctgc ataccctaaa ccttttgaa tctgggctac ttggtgtgtc acatcaacag caccgtgaac cccgtgtgct atgctctgtg caacaaaaa ttcaagaaca ctttcaagat gctgctgctg tgccagtgtg aaaaaaaa gaggcgaag cagcagtaac agcagagaca gtggttcatt tttcacagc gcgcacccga gcagccttg tag</p>	Homo sapiens
441	57180	Leukotriene B4 Receptor BLTR2	NM_019839	<p>GGHTVMQVVF IAFLTGILAL VTIIIGNILVI VSFKNKQIK TVNNYFLLSL ACADLIIGVI SMNLTYYII MNRWALGNLA CDILWLAIDYV ASNASVMNLL VISFDYFESI TRPLTYRAKR TTKRAGVMIG LAWVISFVLW APAILFWQYF VGKRTVPPGE CFIOFLSEPT ITFGTAIAAF YMPVTIMTIL YWRIYKETEK RTKELAGLOA SGTEAETENF VHPGTSSRSC SSYELQQQSM KRSNRRKYGR CHFWEITKSW KPSSEQMDQD HSSSDSWNNN DAAASLENSA SSDEEDIGSE TRAIYSIVLK LPHGSTILNS TKLPSSDNLQ VPEEELGMDV LERKADKLOA QKSVDGGSF PKSFSKLPIQ LESAVDTAKT SDVNSSVGKS TATLPLSPKE ATLAKEFALK TRSQITKRKR MSLVKEKKA QTL SAILLAF IITWTPYNIM VLNTFCDS IPKTFWNLGY WLCYINSTVN PVCYALCNKT FRITFKMLLL CQCDKKRRK QQYQQRQSVI FHKRAPEQAL</p>	Homo sapiens

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444	73584	Cadherin EGF NP_055061.1 LAG Seven- Pass G-Type Receptor 1 (CELSR1/Flam ingo)	<p> cagtgaggac ccgtggctgg cagcccgggc agtcctttgc aaaggcacc cttgtcttaa  aatcacttcg ctatgtggga aaggtggaga tactttata tatttgtatg ggactctgag  gaggtgcaac ctgtatatat atygattcg tgctgacttt gttatcccg gagatccatg  caatgatctc ttgtgtcttt ctctgtcaag attgcaagt tgaattgaa tctggcatgt  gttgacgaaa ctggtgcccc agcagatcaa aggtgggaaa tacgtcagca gtgggggctaa  aaccagcggt ctagaagccc tacagctgcc ttcggccagg aagtggagat ggtgtgggcc  ctccccggcg gccccctggg tcccagtggt tcgctgtgtg tgcgtttgtc ctctgctgcc  atctgccccg gctgtgtgaa ttcaagacag ggcagtgag cactaggcag gtgtgaggag  ccctgctgag gtcactgtgg ggcactgttg ccacacgct gtcatttttc acctggtcat  tctgtgacca ccaccccc cctcacgc cctcacgc tcccgagggt gccggggagc tgcaggtggg  gatggctttg tccctttgctc ctgctcccc tgggacctgg gaccttaaa cgttgcaagt  tcctgatttg gacagaggtg tggggccttc caggccgtta catacctcct gccaatctc  taactctctg agactgcgag gatctccagg cagggttctc cctctgtgag tctgaccaat  tacttcattt tcttcaaat ggccaattgt gcagagggac aaagccacag ccacactctt  caacggttac caaactgttt ttggaaattc acaccaaggt cgggccact gaggcagct  ggcacagct ggcccgagg gctgtggaac ggttcccgga actgtcagac atgtttgatt  ttagcgtttc ctttgtctt caaatcaggt gcccaataa gtgacagca cagctgcttc  caaataggag aaaccataa ataggatgaa aatcaagtaa aatgcaaga tgtccacact  gttttaact tgacctgat gaaaatgta gcaatgttag cagatgccta tgggagagga  aaagcgtatc tgaaaatggt ccaggacag aggatgaaat gagatccca agtctcaca  cctgaatgaa tatacatgt gccctaccag gtgagtgtc ttctgaagat aaaaaactct  agtcccttta aacgtttgcc cctggcgttt cctaagtacg aaaaggtttt taagtcttcg  aacagctccc tttcatgact ttaacaggat tctgccccct gaggtgtaat tttttgttc  tattttttc cactactcc acagccaaca tcacgaggtg taattttta ttgtatcaga  actgttacca aaaaacaact gtcagtttta ttgagatggg aaaaatgtaa acctatttt  attacttaag actttatggg agagattaga cactggaggt ttttaacaga acgtgtattt  attaatgttc aaaaacactg aattacaaat gagaagagtc tacaataaat taagattttt  gaatttgtac ttctgcggtg ctgggttttc tccacaaca ccccgcccc tccccatgcc  caggttgccc gtggaaggga cgtttacgg acgtgcagct gagctgtccg tgtcccatgc  tccctcagcc agtggaactt gccggaactt ttgtccatt cctagttag cctgccacag  cctagatggg cagtttttgt ctttcacaaa atttgaggac tttttttttt tgcattatt  tcttcagttt tctttcttg cactgatctt tctctctcc tctgtgact ccagtgact  agacgttaga cctctgatg ttttccact ggtccctgag gctctgttc  MAPPPPPVLP VLLLLAAAA LPAMGLRAA WEPVPVGGTR AFALRPGCTY AVGAACTPRA P  PRELLDVGRD GRLAGRRVS GAGRPLPLQV RLVARAPTA LSRLRARTH LPCCGARARL  CGTGARLCA LCFVPVGGCA AAQHSALAAP TTLPACRCPP RPRPCGRP ICLPPGGSVR  LRLLCALRA AGAVRVGLAL EAATAGTPSA SPSPSPPLPP NLPEARAGPA RRARRGTSGR  GSLKFRPNY QVALFENEP GTLILQLHAH YTIEGEERV SYMEGLFDE RSRGYFRIDS  ATGAVSTDSV LDRETKEHV LRVKADVST PPRSATYIT VLVKDTNDHS PVFEQSEYRE  RVRENLEVG EVLTIRASDR DSPINANLRY RVLGGAWDFV QLNESGVS TRAVLDREEA  AEYQLLVEAN DQGRNPGPLS ATATVIEVE DENDNPQFS EQNYVVQVPE DVGLNTAVLR </p>	Homo sapiens
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324/448

445	74514	5-HT5A Receptor	NM_024012	<p>LTEQTLKGRL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPREPGRD HINGVAMNVR</p> <p>TGSAQADGSD SEKP</p> <p>atggatttac cagfgaacct aacctccttt tccctctcca cccctcccc tttggagacc A</p> <p>aaccacagcc tcggcaaga cgacctgcgc cccagctcgc cctgtctctc ggtcttcgga</p> <p>gtgcttattc tcaccttgtc gggctttctg gtggcgcgca cgttcgcctg gaacctgctg</p> <p>gtgctggcga ccacctctcg tglacgaacc ttccacacgc tgccccacaa cctgggtgga</p> <p>tccatggccg tctcggtatg cctgggtggc gcgtggtca tgcgctgag cctggtgcat</p> <p>gagctgtccg ggcgcgcctg gcagctaggt cggagctgt gccagctttg gatcgctgc</p> <p>gacgtgcttt gctgcacggc cagcatctgg aacgtgacgg ccatagcctt ggaccgctac</p> <p>tggtccatca cgcgccacat ggaatacacg ctccgaccc gcaagtgcgt ctccaacgtc</p> <p>atgatcggc cactctggc actctccgt gtcatctctc tggccccgt gctttttggc</p> <p>tggggagaga cgtactctga gggcagcgag gagtgcaggt taagccgga gcccttctac</p> <p>gccgtgttct ccaccgtagg cgccttctac ctgcgctct gtgtggtgct cttcgtgtac</p> <p>tggaagatct acaaggctgc caagttccgc gtgggtccca ggaagaccaa tagcgtctca</p> <p>cccatatccg aagctgtgga ggtgaaggac tctgcaaac agcccagat ggtgttcacg</p> <p>gtccgccacg ccaccgtcac cttccagcca gaaggcgaca cgtggcggga gcagaaggag</p> <p>cagcggggcg cctcatggt gggcattctc atggcgtgt tegtgtctctg ctggatcccc</p> <p>ttctttctca cggagctcat cagtcctctc tgctctctgt acatccccc catctggaaa</p> <p>agcatcttcc tgtggtcttg ctactccaac tcttctttt acccctgat ctatacggct</p> <p>ttcaacaaga actcaacaag cgccttcaag aactctttt ctaggcaaca ctga</p> <p>MDLPVNLTSF SLSTPSPLET NLSLKGDDLR PSSPLSVFG VLITLLGFL VAATFAWNL P</p> <p>VLATILRVRT FHRVPHNLVA SMAVSDVIVA ALVMPISLVH ELSRRWQLG RRLCQLWIAC</p> <p>DVLCCTASIW NVTAIALDRY WSITRMEYIT LRTRKCVSNV MIALTWALSA VISLAPLLFG</p> <p>WGETYSEGE ECOVSREPSY AVFSTVGAFY LPLCVLFFVY WKTYKAAKFR VGSRKTNVS</p> <p>PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWREQKE QRAALMVGIL IGVFVLCWIP</p> <p>FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNLIYTA FNKNYNSAFK NFFSRQH</p> <p>gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A</p> <p>aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagtcccc</p> <p>aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagtcttgcc</p> <p>tgtgaagggc aatccttttc cctgggactg ggatctatag aaatacagaa atgtgcccag</p> <p>gggttcatct cctaataaac catcattcac attctcaac ctccctaata accagccacc</p> <p>atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt</p> <p>cagtggaggt ggttgcaacc tgatgctaag gatgtcaag tgtctctcgc ctctgttccc</p> <p>agccagtaag taattccctg gcctcgggcc ataccctca atcttggtca cctgattatg</p> <p>acaggcagac agcacagtaa ataacactat atattaagaa aacccaaagc atatgtatca</p> <p>atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg</p> <p>aaggtcaaca cagtcactgt gatgcgtgta ttccatttt gttaagcatg atctctggtg</p> <p>gtcattttta tcttcttaac ttattggaaa agtctctgt ttggggggcc cgccccgtgt</p> <p>cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccccctcc</p> <p>tctgcccgcg cccagccctc gcccaccct cggcgccgcg acatctgctt gctcagctcc</p> <p>agacggcgcc cggaccctcg ggcgggggat ccagccaggt gggagccccg cagatgaggt</p>	Homo sapiens
446	74514	5-HT5A Receptor	NP_076917.1	<p>MDLPVNLTSF SLSTPSPLET NLSLKGDDLR PSSPLSVFG VLITLLGFL VAATFAWNL P</p> <p>VLATILRVRT FHRVPHNLVA SMAVSDVIVA ALVMPISLVH ELSRRWQLG RRLCQLWIAC</p> <p>DVLCCTASIW NVTAIALDRY WSITRMEYIT LRTRKCVSNV MIALTWALSA VISLAPLLFG</p> <p>WGETYSEGE ECOVSREPSY AVFSTVGAFY LPLCVLFFVY WKTYKAAKFR VGSRKTNVS</p> <p>PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWREQKE QRAALMVGIL IGVFVLCWIP</p> <p>FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNLIYTA FNKNYNSAFK NFFSRQH</p> <p>gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A</p> <p>aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagtcccc</p> <p>aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagtcttgcc</p> <p>tgtgaagggc aatccttttc cctgggactg ggatctatag aaatacagaa atgtgcccag</p> <p>gggttcatct cctaataaac catcattcac attctcaac ctccctaata accagccacc</p> <p>atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt</p> <p>cagtggaggt ggttgcaacc tgatgctaag gatgtcaag tgtctctcgc ctctgttccc</p> <p>agccagtaag taattccctg gcctcgggcc ataccctca atcttggtca cctgattatg</p> <p>acaggcagac agcacagtaa ataacactat atattaagaa aacccaaagc atatgtatca</p> <p>atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg</p> <p>aaggtcaaca cagtcactgt gatgcgtgta ttccatttt gttaagcatg atctctggtg</p> <p>gtcattttta tcttcttaac ttattggaaa agtctctgt ttggggggcc cgccccgtgt</p> <p>cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccccctcc</p> <p>tctgcccgcg cccagccctc gcccaccct cggcgccgcg acatctgctt gctcagctcc</p> <p>agacggcgcc cggaccctcg ggcgggggat ccagccaggt gggagccccg cagatgaggt</p>	Homo sapiens
447	81765	Thromboxane A2 Receptor	NM_001060	<p>MDLPVNLTSF SLSTPSPLET NLSLKGDDLR PSSPLSVFG VLITLLGFL VAATFAWNL P</p> <p>VLATILRVRT FHRVPHNLVA SMAVSDVIVA ALVMPISLVH ELSRRWQLG RRLCQLWIAC</p> <p>DVLCCTASIW NVTAIALDRY WSITRMEYIT LRTRKCVSNV MIALTWALSA VISLAPLLFG</p> <p>WGETYSEGE ECOVSREPSY AVFSTVGAFY LPLCVLFFVY WKTYKAAKFR VGSRKTNVS</p> <p>PISEAVEVKD SAKQPQMVFT VRHATVTFQP EGDWREQKE QRAALMVGIL IGVFVLCWIP</p> <p>FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNLIYTA FNKNYNSAFK NFFSRQH</p> <p>gtaatgcaga gataataaaa cttcttaggt ccataggtct tataataatt taataaccta A</p> <p>aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagtcccc</p> <p>aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa aagtcttgcc</p> <p>tgtgaagggc aatccttttc cctgggactg ggatctatag aaatacagaa atgtgcccag</p> <p>gggttcatct cctaataaac catcattcac attctcaac ctccctaata accagccacc</p> <p>atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactggt</p> <p>cagtggaggt ggttgcaacc tgatgctaag gatgtcaag tgtctctcgc ctctgttccc</p> <p>agccagtaag taattccctg gcctcgggcc ataccctca atcttggtca cctgattatg</p> <p>acaggcagac agcacagtaa ataacactat atattaagaa aacccaaagc atatgtatca</p> <p>atggtatata cccaacagca tcttaggaat ggagagtctg tagcaagggc ctccaatgtg</p> <p>aaggtcaaca cagtcactgt gatgcgtgta ttccatttt gttaagcatg atctctggtg</p> <p>gtcattttta tcttcttaac ttattggaaa agtctctgt ttggggggcc cgccccgtgt</p> <p>cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccccctcc</p> <p>tctgcccgcg cccagccctc gcccaccct cggcgccgcg acatctgctt gctcagctcc</p> <p>agacggcgcc cggaccctcg ggcgggggat ccagccaggt gggagccccg cagatgaggt</p>	Homo sapiens

448	81765	Thromboxane A2 Receptor	NP_001051.1	ctctgaaggt gtgcctgaac cagtgccagc ctgcccctgc tgcagcatcg gctgatggg gtggtgactg atccctcagg gctccggagc catgtggccc aacggcagtt cectggggcc ctgtttccgg ccacaaaca ttaccttga ggagagcgg ctgatgcct cgcctgggtt cgccgctcc ttctgctgg tgggctggc ctcaacctg ctggcctga gctgctggc ggcgcgggg caggggggtt cgcacacgg ctcctcttc ctcacctcc ttgctggct cgtctcacc gacttctctg ggtgctggt gaccggacc atcgtggtgt ccacacacg cgcctcttc gactggcac cgtggacc ttgctgctgt ctctgctgt tcatgggct cgtcatgac ttcttgccc tgtccctgct gctgctggg gcgcacatgg cctcagagcg ctacctgggt atacccggc ccttctcgcg ccgcgcggtc gctcgacg ccgcgcctg ggccaccgtg gggctggtgt gggcgggcg cgtggcgctg gctgctgctg cctgctggg cgtgggtcgc tacacgtgc aataccggg gtccctgtgc ttcccgacg tggcgccga gtcggggac gtggccttcg ggtgctctt ctccatgctg ggcggcctct cggtcgggt gtccttctc ctgaacacgg tcagctggc caccctgtc cactctacc acgggcagga ggcgcccgag cagctctccc gggactcga ggtggagatg atggctcagc tctggggat catggtgtg gccagctgt gtgtgctgc ccttctggtc ttcatggcc agacagtgt cgaaacccg cctgcatga gcccgcgg cgactgtcc cgcaccacgg agaaggagt gtcatctac ttgctgctg ccacctgaa ccagatcctg gaccctggg tgtatctct gtccgcgc gctgtctcc ggcgtctca gctcgctc agcaccggc ccagctcgt gtccctcag cccagctca cgcagctc cggctgctc taggaagtgg acagagcgc ctcccgcg ccttcgcgg agccttggc cctcgacga gccatctgc ctgttctgag gattcagggg ctgggggtgc tggatggaca gtgggacat cgcagcgggt ttggtgtga cccaatca acccggggac ccccaactc tccctgatcc ttttaccagg cactctcct tctcgccc ctttttccc tccagagctc ccacccttc tctggctcc tcccaaccc aggaaggga tgcagacatt ggaagagggt ctgcatggc tattttttt tttagacgga gtcttgctct gtcccccagg ctggagtga gtggcgcaat ctcagctcac tgcaacctc acctccggg ttcaagcgt tctcctgct cagctcctg agtagctggg actataggc cgccaccac cgcccggtc attttctgt ttttagtaga gacgggggtt caccgtgtg gccagctgg cttgaactc ctgacctcag gtgattcacc agcctcagc tcccaagtg ctggggtcac aggcagcct ggaatagat ggcacgatct cggctcactg caacctcgc ctcactctgt gcccagcct tctgctcct gctcccgag cagctgggt tacaggcgta ctcccggtt caagcgattc tctgctcct gctcccgag gacctcgaat ttgacctact tgctgggta agcactcgc ccggccttg catgctctt gacctctgt cccgaaagg ttgaatgta cagttgcttc ctttgaacc tccaacaggg agggctctgt ccgaaagg at aacgggggga cccctttt ttgcacaaat atatctctgc ctttggtttt at SSFLTFLCGL VLTDFLGLV TGTIVSQHA ALFEHVAADP GCRLCRFMGV VMFFGLSPL LLGAAMASER YLGITRPFSS PAVASQRRAW ATVLVWAAA LALGLPLLG VGRYTVQPG SWCFLTLGAE SGDAFGLLE SMLGGLSVGL SFLNTVSVA TLCHVYHGQE AAQRPRDSE VENMAQLLGI MVVASVCWLP LLVFIAQTVL RNPPAMSPAG QLSRTTEKEL LIYLRVATWN QILDWVYIL FRAVLRRLO PRLSTRPRSL SLQPQLTQRS GLQ	Homo sapiens
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449	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NM_005283	atggagtctc caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A	Homo sapiens
				ccgtgtgaga accaggcctg ggtcttttgc accctggcca ccactgtcct gtactgcctg	
				gtgtttctcc tcagctagt gggcaacagc ctggtcctgt gggctcctgg gaagtatgag	
				agcctggagt cctcaaccaa catcttcac ctcaacctgt gccttcaga cctggtgttc	
				gcctgcttgt tgctgtgtg gatctccca taccactggg gctgggtgct gggagacttc	
				ctctgcaaac tctcaatat gatcttctcc atcagcctct acagcagcat ctcttctctg	
				accatcatga ccatccaccg ctacctgtcg gtatgagcc cctctccac cctgcgcgc	
				ccaccctcc gctgcgggt gctggtgacc atggtctgtt gggtagccag catcctgtcc	
				tccatctcg acaccatctt ccacaagggt ctcttctcgg gctgtgatta ttccgaactc	
				acgtggtacc tcacctccgt ctaccagcac aacctctct tctgctgtc cctggggatt	
				atcctgttct gctacgtgga gatcctcagg acctgttcc gctcagctc caagcgggc	
				caccgcagg tcaagctcat ctctgccac gtggtggcct acctctcag ctgggggtccc	
				tacaaactca cctgtttct gcagacgtg ttctggacc agatcatccg gagctgcgag	
				gccaacacagc agtagaata cgccctgctc atctgcgca acctgcctt ctcccactgc	
				tgctttaacc cgtgtctcta tgtcttcgtg ggggtcaagt tccgacaca cctgaaacat	
				gtctccggc agttctggt ctgccggctg caggcaccca gccagcctc gatccccac	
				tccctggtg ccttcgcta tgaggcgcc tcttctact ga	
450	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	(C NP_005274.1	MESSGNPEST TFFYYDLQSQ PCENQAWVFA TLATTVLYCL VFLLSLVGNL LVLWLVKYE P	Homo sapiens
				SLESNTNFI VNLCLDLVF ACLLPWISP YHWGWLGD F LCKLNMIFS ISLYSSIFFL	
				TIMTIHRYLS VNSPLSTLRV PTLRCRLVT MAVWVASILS SILDITFHKV LSSGCDYSEL	
				TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TIFRSRSKRR HRTVKLIFAI VVAYFLSWG P	
				YNFTLFQLT FRTQIIRSC AKQLEYALL ICRNLAFSHC CFNPVLYVFV GVKFRTLKH	
				VLRQFWFCRL QAPSPASIPH SPGAFAYEGA SFY	
451	130108	G Protein-Coupled Receptor GPR75	NM_006794	gcgatggcga tgaagcctct agtcctgcat catccagagc ggcaggcgag ctgggggtccg A	Homo sapiens
				gactgcgaga tggaggagg ggcgcgtcg gcaccggca ggcttatctg tottgggcct	
				cttttgtcac atattgtca tctgtgagct gaggcctga ctcactgagt atttttgggg	
				agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc	
				cccaatgcc cctcgctcca tgtgcctcac tcacaggaa gaaacagcac ctctctccag	
				gagggtcttc aggatctcat ccacacagcc acctggtga cctgtacttt tctactggcg	
				gtcatcttct gcctgggttc ctatggcaac ttcattgtct tctgtctctt cttcgatcca	
				gccttcagga aattcagaac caactttgat ttcatgatcc tgaacctgtc ctctgtgac	
				ctcttcattt gtggagtgc agcccccatg ttacactttg tgttattctt cagctcagcc	
				agtagtatcc cggatgcttt ctgcttccat ttccatctca ccagttcagg ctctcatcatc	
				atgtctctga agacagtgc agtgatcgcc ctgcaccggc tccggatggt gttggggaaa	
				cagcctaacc gcacggcctc ctctccctgc accgtactcc tcacctgtct tctctgggcc	
				accagtttca ccttggccac ctgggtacc ttgaaaacca gcaagtccca cctctgtctt	
				cccatgtcca gtctgattgc tggaaaaagg aaagcattt tgtctctcta tgtggtcgac	
				ttcaccttct gtgtgtgtgt ggtctctgtc tcttatcatca tgattgtctc gacctgcgg	
				aagaacgctc aagtcagaaa gtgccccctt gtaatcacag tcatgtctc cagaccacag	
				cctttcatgg ggttccctgt gcaggagggt ggagatccca tccagtgtgc catgccgct	
				ctgtatagga accagaatta caacaaactg cagcacgttc agaccgtgg atataccaag	

452	130108	G Protein- Coupled Receptor GPR75	NP_006785.1	<p>           agtcccaacc aactgggtcac cctgcagca agccgactcc agctcgtatc agccatcaac            ctctccactg ccaaggattc caaagccgtg gtcacctgtg tgatcattgt gctgtcagtc            ctgggtgtgt gttctccact ggggatttcc ttggtacagg tggttctctc cagcaatggg            agcttcattc ttaccacagt tgaattgttt ggatttactc ttatatittt caagtcagga            ttaaaccttt ttatatattc tcggaacagt gcagggtgga gaagaaagt gctctgtgtg            ctccaataca taggctcggg ttttttctgc tgcaacaaa agactcgact tcgagccatg            ggaagaaggga acctcgaagt caacagaaac aaatctctcc atcatgaaac aaactctgcc            tacatgttat ctccaaagcc acagaagaaa tttgtggacc aggtttgtgg cccaagtcat            tcaaaagaaa gtatgtgtgag tcccaagatc tctgtggacc atcaacactg tggtcagagc            agctcgacc ccatacaacac tcggattgaa cttactatac gcatctataa cagcagccct            tccagaggag aggcagccc atgtaactta cagccagtaa actcttttgg atttgccaat            tcataattg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact            tcagccaagc agattccagt cccctcgtt taaagtcagt gaggctatag gatcttatgt            aaacagtitt tgtttctgat agtaatggac ttattcttaa ctbgagatca gtggcggatc            aaaacctaca agattcaact gaaaagtggc cagttatggt ttcttttcat ctgatgtgtc            agtatctgtt gattgtcttt gtagttgtt gacatcttaa gatttgatgt gaaagtttta            gattttttac cctg         </p>	Homo sapiens
				<p>           P            FIVLFFDP AFRKRTNFD FMILNLSFCD LFICGVTAPM TTFVLFSSA SSIPDAFCFT            FHLTSSGFI MSUKTVAVIA LHRLRWLGK QPNRTASFCP TVLLTLLLWA TSFTLATLAT            LKTSKSHLCL PMSSLIAGKG KAILSIVVD FTFCVAVSV SYIMIAQTIR KNAQVRKCPP            VITVDASRPQ PFMGVPVQGG GDPIQCAMPA LYRNQYNKL QHVQTRGYTK SPNQLVTPAA            SRLQLVSAIN LSTAKDSKAV VTCVIIIVSV LVCCPLGIS LVQVLLSNG SFILYQFELF            GFTLIFKSG LNPFIIYSRNS AGLRRKVLWC LQYIGLGFFC CKQTRLRAM KGKLEVNRN            KSSHHTNSA YMLSPKPQKK FVDQACGFSH SKESMVSPKI SAGHQHCGQS SSTPINTRIE            PYYSIYNSSP SQEISSPCNL QPVNSFGFAN SYIAMHYHTT NDILVQYDST SAKQIPVPSV            ataacagcat gaagtgcct ggaactggaa taggctgtc ctctccctc accctcccc A            tccttgtccc tctgtctacc cctcgtcgt tcctccctc cggcgagggc cgcctttata            acaactgtc agagtgcgag ggcgggatag ctgtccaaag tctcccccag cactgaggag            ctgcctgtc gccctcttc gcgcgggaag cagacccaaag ttcacggcca acgccttggc            actagggtcc agaattgcta caacagtccc tgatggttgc cgcaatggcc tgaatccaa            gtactacaga ctttgtgata aggtgaagc ttggggcatc gtcctagaaa cggtgccac            agcgggggtt gtgacctcgg tggccttcat gctcacttc ccatcctc tctgcaaggt            gcaggactcc aacaggcgaa aaatgctgcc tactcagtt ctctctcc tgggtgtgtt            gggcatcttt ggcctcact tcgcttcat catcgactg gacgggagca cagggccac            acgctcttc ctctttggga tcctctttc catctgttc tctgcctgc tggctcatgc            tgtcagtctg accaagctcg tccgggggag gaagccctt tccctgttgg tgattctggg            tctggccgtg ggcttcagcc tagtccagga tttatcgtc attgaatata ttgtcctgac            catgaatagg accaacgtca atgtctttc tgagcttcc gctcctcgtc gcaatgaaga            ctttgtctc ctgtcacct acgtctctt ctbgatggc ctgaccttc tcatgtctc            cttcaccttc tgtggttctc tcacgggctg gaagagacat gggggccaca tctacctcac         </p>	Homo sapiens
453	133117	G Protein- Coupled Receptor RAIG1	NM_003979		

454	133117	G Protein- Coupled Receptor RAIG1	NP_003970.1	gatgtctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc ttcctgacit tgaccgcagg tgggatgaca ccatcctcag ctccgcttg gctgccaatg gctgggtgtt cctgtggct tatgttagt cagagtttg gctgctaca aagcaacgaa accccatgga ttatctgtt gaggatgctt tctgtaaac tcaactgtg aagaagagct atggtgtgga gaacagagcc tactetcaag aggaatacac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaacag cctcccccac aggaattctc catcccacgg gccacgctt ggccgagccc ttacaaagac tatgaagtaa agaaagaggg cagctaaact tgcctgaag agtggacaa atgcagcgg gcgacagatc tagcgggagc tcaaaggat gtggcgaaa tcttgagct tctgaaaa ctgtacaaga cactacggga acagtttgcc tccctccag cctcaaccac aattctcca tgcggggct gatgtggct agtaagactc cagttcttag aggcgctgta gtatttttt tttttgtct catcctttgg atacttttt taagtggag tctcaggcaa ctcaagtta gaccttact cttttgttt gtttttgaa acaggatctt gctctgac ccaggctga gtgcagtgt gcgacacag cccagtcag cctcgaccac ctgtgctcaa gcaatcctcc catctccatc tcccaagt ctgggatgac agcgtgagc cacagctcc agcctaggcc cttaatcttg ctgttattt ccatggacta aaggtctggt catctgagct cagctggct cacacagctc taggggctg ctcctaac tcacagtgg tttgtgagg ctctgggccc cagagcagac ctgcatact gagcaaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagccaa ttgctggcac cccgctccc caacctctt tgcctggta ggagaggcta aagatcacc taaatctact catctctc gtctgctc acatgggccc tcagcagctc ccagacaca attcacaggt caccctctc ttcttgact gtcccaaac ttgctgtcaa tccgagatc taatctccc ctacgctctg ccaggaaatc ttacagacct cactagcaca agcccgtt ctccttgtca ggagaattt tagatcattc tcacttcaa ttcctggggc tgatactct ctcatcttg acccaacct ctgtaaatag attacgca ttacgggct cattctgtaa gtggcagtg tctctaag gagagtggt cattgtataa taagtattc acctgagtat gcaataaaga tgtggtggcc actcttcat ggtggtggca gcaaaaaaaa aaaaa RRKMLPTQFL FLLGLGIFG LTFAFIIGLD GSTGPRFFL FGILFISICFS CLLAHAVSLT KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMRT NVNVESELSA PRNEDFVLL LTYVLFMAL TFLMSSFTFC VSPEFWLLTK QHNYLTMLLS IAIWVAMITL LMLPDRRW DDTILSSALA ANGWVFLAY GSFTGKRRHG AHYLTMLLS QHNYLTMLLS IAIWVAMITL LMLPDRRW SQEETQGF ETDGLYAPY STHFQLQNP PQKEFIPRA HAWPSYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gagcaacacc A acgggcatca cagcttctc catgcccgc cgtgacgggt aatgcatcg tcacttggat catcctggcc ctggccctgg tctgtgtggc cgtgacgggt aatgcatcg tcacttggat catcctggcc catcgaggga tgcgacagat caccacactac ttcatgtca atctggcgt ggctgacct tgcatggctg cttcaatgc cgccttcaac tttgtctatg ccagccacaa catctggtac tttggccgtg cttctgcta cttccagaa cttctccca tcacagccat gttgtcagc atctactcca tgaccgcat tgctgcccac aggtacatgg ccactgtcca ccccttccag cctcggttt cagctcccag caccaggcg gttattgtg gcatctggct ggtggtctc gccctggct cccctcagt cttctactcc accgtacca tggaccagg tgccaccaag	Homo sapiens
455	152198	Tachykinin Receptor 2	NM_001057	gatgtctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc ttcctgacit tgaccgcagg tgggatgaca ccatcctcag ctccgcttg gctgccaatg gctgggtgtt cctgtggct tatgttagt cagagtttg gctgctaca aagcaacgaa accccatgga ttatctgtt gaggatgctt tctgtaaac tcaactgtg aagaagagct atggtgtgga gaacagagcc tactetcaag aggaatacac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaacag cctcccccac aggaattctc catcccacgg gccacgctt ggccgagccc ttacaaagac tatgaagtaa agaaagaggg cagctaaact tgcctgaag agtggacaa atgcagcgg gcgacagatc tagcgggagc tcaaaggat gtggcgaaa tcttgagct tctgaaaa ctgtacaaga cactacggga acagtttgcc tccctccag cctcaaccac aattctcca tgcggggct gatgtggct agtaagactc cagttcttag aggcgctgta gtatttttt tttttgtct catcctttgg atacttttt taagtggag tctcaggcaa ctcaagtta gaccttact cttttgttt gtttttgaa acaggatctt gctctgac ccaggctga gtgcagtgt gcgacacag cccagtcag cctcgaccac ctgtgctcaa gcaatcctcc catctccatc tcccaagt ctgggatgac agcgtgagc cacagctcc agcctaggcc cttaatcttg ctgttattt ccatggacta aaggtctggt catctgagct cagctggct cacacagctc taggggctg ctcctaac tcacagtgg tttgtgagg ctctgggccc cagagcagac ctgcatact gagcaaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagccaa ttgctggcac cccgctccc caacctctt tgcctggta ggagaggcta aagatcacc taaatctact catctctc gtctgctc acatgggccc tcagcagctc ccagacaca attcacaggt caccctctc ttcttgact gtcccaaac ttgctgtcaa tccgagatc taatctccc ctacgctctg ccaggaaatc ttacagacct cactagcaca agcccgtt ctccttgtca ggagaattt tagatcattc tcacttcaa ttcctggggc tgatactct ctcatcttg acccaacct ctgtaaatag attacgca ttacgggct cattctgtaa gtggcagtg tctctaag gagagtggt cattgtataa taagtattc acctgagtat gcaataaaga tgtggtggcc actcttcat ggtggtggca gcaaaaaaaa aaaaa RRKMLPTQFL FLLGLGIFG LTFAFIIGLD GSTGPRFFL FGILFISICFS CLLAHAVSLT KLVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTMRT NVNVESELSA PRNEDFVLL LTYVLFMAL TFLMSSFTFC VSPEFWLLTK QHNYLTMLLS IAIWVAMITL LMLPDRRW DDTILSSALA ANGWVFLAY GSFTGKRRHG AHYLTMLLS QHNYLTMLLS IAIWVAMITL LMLPDRRW SQEETQGF ETDGLYAPY STHFQLQNP PQKEFIPRA HAWPSYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctggccctga gagcaacacc A acgggcatca cagcttctc catgcccgc cgtgacgggt aatgcatcg tcacttggat catcctggcc ctggccctgg tctgtgtggc cgtgacgggt aatgcatcg tcacttggat catcctggcc catcgaggga tgcgacagat caccacactac ttcatgtca atctggcgt ggctgacct tgcatggctg cttcaatgc cgccttcaac tttgtctatg ccagccacaa catctggtac tttggccgtg cttctgcta cttccagaa cttctccca tcacagccat gttgtcagc atctactcca tgaccgcat tgctgcccac aggtacatgg ccactgtcca ccccttccag cctcggttt cagctcccag caccaggcg gttattgtg gcatctggct ggtggtctc gccctggct cccctcagt cttctactcc accgtacca tggaccagg tgccaccaag	Homo sapiens



329/448

Homo  
sapiens

NP\_001048.1

152198 Tachykinin  
Receptor 2

456

tgcgtggtgg cctggcccgga agacagcggg ggcaagacgc tctctctgta ccacctcgtg  
 gtgatgccc tcatctactt cctgccgctc gcggtgatgt ttgtagccta cagcgtcatc  
 ggccacgc tctggagcg cgcagtgcc ggacatcagg cgcacggtgc caacctcgc  
 catctgcagg ccaagaagaa gtttgtgaag accatggtgc tgggtggtgc gacgtttgcc  
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 gcctccgct gctgcccatg ggtcacacc accaaggaag ataagctcga gctgactccc  
 agacatccc tctccacgag agtcaacagg tgtcacacta aggagacttt gttcatggct  
 ggggacacag cccctccga ggtaccagt ggggagcggg ggcgtcccca ggtggatca  
 gggctatggt ttgggtatgg ttgtctgcc cccacaaaa ctcatgttga aattga  
 152198.1 MGTCDIVTEA NISSGPESNT TGITAFSNPS WQLALWAPAY LAIVLAVAVTG NAIVIVILA P  
 HRRMRTVTNY FIVNLALADL CMAAFNAFN FVYASHNIWY FGRAFCYFON LFPITAMFVS  
 IYSMTAIAAD RYMAIVHPFQ PRLSAPSTKA VIAGIWLVAL ALASPQCFYS TVTMDQGATK  
 CVVAWPEDSG GKTLILLYHLV VIALIYFELP AVMFVAYSVI GLTLWRRVAVP GHQAHGANLR  
 HLQAKKKFKV TMVLVWLTFE ICWLPHYLYF ILGSFQEDIY CHKFIQQVYL ALFWLAMSST  
 MYNPIIYCCL NHRFRSGFRL AFRCPPWVTP TKEDKLELTP TTSLSRVRN CHTKETLFMA  
 GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI

Homo  
sapiens

NM\_000369

152201 Thyrotropin  
Receptor

457

cgcctcccg gctctctttt ggctcggggt aaccgaggt gcagagctga gaatgagcg A  
 atttcggagg atggagaaat agcccgaggt ccgctggaaa atgagcgcg cggacttgct  
 gcagctgggt ctgctcctgc acctgccag ggcactggcg ggaatgggt gtctctctcc  
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 gactttcctt cactcacac gggctgacct ttcttaccac agccactgct gtgcttttaa  
 gaatcagaag aaatcacag gaatccttga gtccttgatg tgtaaatgaga gcagatgca  
 gagcttgccg cagagaaaaat ctgtgaatgc cttgaatagc cccctccacc aggaatatga  
 agagaatctg ggtgacagca ttgttgggta caaggaaaa tccaagtcc aggatactca  
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 caccatatgt ggggacagtg aagacatggt gtgtacccc aagtcagatg agttcaaccc  
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458	152201	Thyrotropin Receptor	NP_000360.1	MRPADLLQLV LLLDLPRDLG GMGCSPPCE CHQEDFRVT CKDIQIRPSL PPSTQTLKLI P	Homo sapiens
				ETHLRTPSH AFSNLPNISR IYVSDVTLQ QLESHSFYNL SKVTHIEIRN TRNLTYIDPD	
				ALKELPLLKF LGIENTGLKM FPDLTKVYST DIFFILEITD NPYMTSIPVN AFQGLCNETL	
				TLKLYNNGFT SVQGYAFNGT KLDVAVLNKN KYLTVIDDKA FGGVSGPSL LDVSQTSVTA	
				LPSKGLHLK ELIARNWTLL KKLPLSLSL FLHTRADLSYP SKCCAFKNQK KIRGILESML	
				CNESSMQSLR QRKSVNALNS PLHQEYEENL GDSIVGYKEK SKFQDTHNNA HYYVFEEQE	
				DEIGFGQEL KNQOEETLQA FDSHYDYTIC GDSDEMVCTP KSDEFNPNCE IMGYKFLRIV	
				VWVFSLLALL GNVEVLLILL TSHYKLNVRP FLMCNLAFAD FCMGYMLLLI ASVDLYTHSE	
				YVNHAIQWT GPGCNTAGFF TVFASELSVY TLTVTILRW YAITFAMRLD RKIRLRHACA	
				IMVGGWVCCF LLALLPLVGI SSYAKVSICL PMDTETPLAL AYIVFVLIN IVAFVIVCCC	
				HVKIYITVRN PQYNPGDKDT KIARMAVLI FTDFICMAPI SFYALSALIN KPLITVNSNK	
				ILLVLFPYLN SCANPFLYAI FTKAFQDFV ILLSKFGICK RQAQAYRGQR VPPKNSTDIQ	
				VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQSQISEEYM QTVL	
459	152245	C-C Chemokine Receptor 2	NM_000648	caggactgcc tgagacaagc cacaaactga cacagagaaag tggattgaac aaggacgcat A	Homo sapiens
				ttccccagta catccacacac atgctgtcca catctcgcttc tcggtttatc agaaatacca	
				acgagagcgg tgaagaagtc accacctttt ttgattatga ttacggtgct cctgtcata	
				aatttgacgt gaagcaaat ggggcccacac tctgtccctc gctctactcg ctggtgttca	
				tctttggttt tgtgggcaac atgctgtgctg tctctcatct aataaactgc aaaaagctga	
				agtgtctgac tgacatttac ctgctcaacc tggcatcttc tgatctgctt ttcttatta	
				ctctcccatc tggggtctac tctgtgcaa atgagtggtt cttggggaat gcaatgtgca	
				aattattcac agggctgtat cacatcggtt atttggcgg aatctcttc atcatctcc	
				tgacaatcga tagatacctg gctattgtcc atgctgtgtt tgccttaaaa gccaggacgg	

460	152245 C-C Chemokine Receptor 2	NP_000639.1	<p> tccaccttgg ggtggtgaca agtgtgatca cctggttggt ggctgtgttt gcttctgtcc  caggaatcat ctttactaaa tgccagaaaag aagattctgt ttatgtctgt ggcccttatt  ttccacgagg atggaataat ttccacacaa taatgaggaa cattttgggg ctggtctctgc  cgctgtcat catgtcatc tgctactcgg gaatcctgaa aacctgctt cgggtgcgaa  acgagaagaa gaggcatagg gcagtggag tcattctcac catcatgatt gtttactttc  tcttctggac tccctataac attgtcattc tcctgaacac ctccaggaa ttcttcggcc  tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg  ggatgactca ctgtgcatc aatcccatca tctatgcctt cgttggggag aagttcagaa  ggtatctctc ggtgttcttc cgaagacaca tcaccaagcg ctctgcacaa caatgtccag  ttttctacag ggagacagtg gatggagtga ctccaacaaa cagccttcc actggggagc  aggaagtctc ggtggtttaa taaaacgagg agcagtttga ttgtgtttaa taaagggaga  taacaatctg tatataacaa caaaactcaa ggtttgttg aacaatagaa acctgtaaa  caggtgcccc ggaacctcag ggctgtgtgt actaatacac aaactgtggg tagagacttt gactctccag  tccaacatgt gtcacgggaa taatccagaa aactgtggg tagagacttt gactctccag  aaagctcatc tcagctcctg aaaaatgcct cattacttg tgtaaatcct cttttcttag  tcttcataat ttcttcactc aatctctgat tctgtcaatg tcttgaatc aagggccagc  tggaggtgaa gaagagaatg tgacaggcac agatgaatgg gagtggagg tagtggggtc  agggctgaga ggagaaggag ggagacatga gcctggcctga gcctggacaa agacaaaggt  gagcaaaagg ctcaagcatt cagccaggag atgatactgg tccctagccc catctgccac  gtgtatttaa ccttgaaggg ttcaccaggg caggagagtg ttgggaaactg caataaacctg  ggagtttggg tggagtcoga tgattctctt ttgcataagt gcattgacata tttttgcttt  attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct  ccattgttca gatgtctctt aggccacatc cccctgtcta aaaaattcaga aaattttgt  ttataaaga tgcattatct atgatagtct aatatatgta tatgcaatat aaaaattag  MLVLLILNC KKLKCLTDIY LLNLAISDLI FLITPLWAH SAANWVFGN AMCKLFTGLY  HIGYFGGIF IILLTIDRYL AIVHAFALK ARTVTFGWV SVITWLAVF ASVPGIIFTK  CQKEDSVYVC GPYFPRGMN FHTIMRNILG LVLPLIMVI CYSGLKTL RCRNEKKRHR  AVRVFTIMI VYFLFWTPYN IIVILNTFQE FFGLSNCEST SLDQATQVT ETLMTHCCI  NPILYAFVGE KFRRYLSVFF RKHITKRFCK QCPVYRET V DGVSTNTPS TGEQEVSAGL  CAGAAATCCT CAGGTCCAC AGAAATGAAC ACGTTTCTA AAATAAAGTC AAGCCAAGCT A  GTCCTACCCC AAGAAAATC CTAGCAAGCA AAGTGGCTT CCTTCTCTGAG GCCCAAGCCA  GGTGTGTCCA ACGGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC  ACTTGATGAG TAAGGTGAAA TAGGGAACCC AAGTCAGACG ACACCTCCCT TCTGAGTCCC  AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA  GACTGCCAGG GTCCATATGA CCAAGCGGGG GTCCAGGTG TGAAGCTGGG GTTGAGGATC  CAATTATCTGA ATTTTCCACT CTATGGATGA TCACITTTAT TCTTTTCTT TCTTGAAT  TATTTCCATT TGTATTATCC TAAATTCCCT GTTAGATCAC CTGTGAAAGC TTGCAACTGT  CTGATAAGAA TAAAGGGGGA AGGATTGAC TTACAGCAG AGACTTCAGA AGGAGTCTC  TCTAGGAGCA AATTGGGGC AATCCAGTG GAAGACTGGA CTTGAGCTGC  GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens
461	152299 Interleukin-8 Receptor A	LG5459		Homo sapiens

agctgttaag tcaactctgat ctctgactgc agctctact gtggacaca cctggccggt A  
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cagccctgt atgtagaaa ctgagacact caacaagtat gtgtgatca tgcctatgc  
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ccagaagcgt cacttggtca agttgtttg tcttgctgc tgggactgt ctatgaatct  
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ctatgaggtc ctgggaaatg acacagcaaa atggcgatg gtgttcgga tctgctca  
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cgtcctcctc ttctgcttt gctggctgcc ctacaactg gtctgctgg cagacacct  
catgagacc cagtgatcc aggagagctg tgagcgccg acaacatcg gccgggacct  
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463	152299	Interleukin-8 Receptor A	NP_000625.1	acaggaatga atgcagctg aaaaagaccac tctttt MSNITDPQMW DFDDLNFTHM PPADEYSPC MLETETLNKY VVIAYALVF LLSLLGNSLV P MLVILYSRVG RSVTDVYLLN LALADLLFAL TLPIMAASKV NGWIFGTFLC KVVSLLEKVN FYSGILLIAC ISVDRYLAIV HATRTLQKR HLKFKVCLGC WGLSMNLSLP FFLFRQAYHP NNSSPVCYEV LGNDTAKWRM VLRIPLPHTFG FIVPLFWLFC CYGFTLRTLK KAHMGQKHRA MRVIFAVVLI FLICWLPYNL VLLADTLMT QVIQESCERR NNIGRALDAT EILGFLHSCL NPIIYAFIGQ NFRHGLKIL AMHGLVSKKEF LARHRTSYT SSSVNVSSNL	Homo sapiens
464	158822	Mas Proto-Oncogene	NM_002377	cctgagcct cctcatggat gggtcaaacg tgacatcatt tggttgtgag gaacccacga A acatctcaac tggcagggaac gctcagctg ggaatgcaca teggcaaat cccatcgtgc actgggtcat tatgagcatc tccccagctg ggtttgttga gaatgggatt ctcctctggt tcctgtgctt ccgagatgaga agaaatccct tcaatgtcta catcaccac ctgtctatcg cagacatctc actgctcttc tgtattttca tctgtctat cgactatgct ttagattatg agctttcttc tggccattac tacacaattg tcacattatc agtgactttt ctgtttggtc acaacacggg cctctatctg ctgacggcca ttagtgtgga gaggcgcctg tcagtccttt acccaatctg gtacagatgc catgcacca agtaccagtc ggcattggctc tgtgcccttc tgtgggtctt ttctgtcttg gtgaccacca tggagatagt catgtgcac gacagagaag aagagagtca ctctcggaat gactgcgag cagtcacatc ctttatagcc atcctgagct tcctgggtctt cagcccttc atgctggtgt ccagcaccat ctgtgtcgtg aagatccgga agaaacagtg ggttcccat tctcccaagc ttacatagt catcatggct accatcatta tattctcat ctctgctatg cccatgagac tctttacct gctgtactat gagtattggt cgaccttgg gaacctacac cacatttccc tgccttctc cacaataac agtagcgcca acctttcat ttaattcttt gtgggaagca gtaagaaga gacattcaag gagtccttaa aagttgtctt gaccagggtt ttcaaaagatg aaatgcaacc tcggcgccag aaagacaatt gtaatacgtt cacagtgag actgtcgtct aagaactgtg aggaagttg tggataaaaa tgggtggaaca caggtcattt ttagttgtg ctggaatat gacttaagta tctcctaaat gtgatacaga agaacatctc atcccatatg catgagatc taattaatga tgaat MRRNPFTVYI THLSIADISL LFCIFILSID RNASVGNHR QIPVHVIM SISPVGFVEN GILLWFLCFR P YLLTAISVER CLSVLYPIWY RCHRPKYQSA LVCALLWALS CLVTMEYVM CIDREESH RNDGRAVIF IAILSFLVFT PLMLVSSSTIL VVKIRKNTWA SHSSKLYIVI MVTIIFLIF AMPMLLYLL YYEYWSFTGN LHHISLLEST INSSANPFY FVGSKKKR FKESLKVLT RAFKDEMQR RQKNCNTVT VETV	Homo sapiens
465	158822	Mas Proto-Oncogene	NP_002368.1	atgctgcccg actggaagag ctccttgatc ctcattgctt acatcatcat cttcctcaat A ggcctccctg ccaacctctt ggccctgagg gctttgtgg ggcggatccg ccagccccag cctgcacctg tgacatcct cctgctgagc ctgacgctgg ccgacctct cctgctgctg ctgctgccc tcaagatcat cgaggctgag tcgaacttc gctggtaacct gcccaagctc gtctgcccc tcaagagttt tggctctac agcagcatct actgcagcac gtggctcctg gcgggcatca gcatcgagcg ctacctgga gtggtttcc ccgtgcagta caagctctcc cgccggcctc tgtatggagt gattgcagct ctgtggcctt gggttatgtc ctttgggtcac tgcaccatcg tgatcatcgt tcaatacttg aacacgactg agcaggtcag aagtggcaat	Homo sapiens
466	159152	G Protein-Coupled Receptor GPR43	NM_005306		Homo sapiens

467	159152 G Protein- Coupled Receptor GPR43	NP_005297.1	<p>gaaattacct gctacagagaa cttcacccgat aaccagttgg acgtggtgct gcccgtgcgg  ctggagctgt gctgtgtgct cttcttcate cccatggcag tcaccatctt ctgctactgg  cgttttgtt ggatcatgtt ctcccagccc cttgtggggg ccagagggc gcgccgagcc  gtggggtgtg ctgtgtgtgac gctgtctaat ttctgtgtgt gcttcggacc ttacaacgtg  tcccacctgg tgggttatca ccagagaaaa agccccgtgt ggcgggtcaat agccgtggtg  ttcagttcac tcaacgccag tctggacccc ctgctcttct attctcttc ttcagtgtgtg  cgcagggcat ttgggagagg gctgcagggt ctgcggaatc agggctcttc cctgttggga  cgcagaggca aagacacagc agaggggaca aatgaggaca ggggtgtggg tcaagagagaa  gggatgccaa gctggagctt cactacagag tag</p> <p>MLPDWKSSLI IMAYIIIFLT GUPANLLALR AFVGRIRQPQ PAPVHILLLS LTLADLLLLL P  LLPFKIIIEA SNFRWYLPKV VCAITISFGFY SSIYCSTWLL AGISIERYLG VAFPVQYKLS  RRPLYGVIAA LVAVWMSFGH CTIVIIQVYL NTTEQVRSNG LVGAQRARRA VGLAVVTLN FLVCFGPYNV  LELCLVLFPI PMAVTIFCYW RFWIMLSQP LVGAQRARRA VGLAVVTLN FLVCFGPYNV  SHLVGYHQRK SPWRSIAV FSSLNASLDP LLFYFSSSW RRAFGRGLQV LRNQGSLLG  RRGKDTAEGT NEDRGVGQGE GMPSSDFTTE</p>	Homo sapiens
468	159973 Vasoactive Intestinal Polypeptide Receptor 1	NM_004624	<p>ggccacaggc cagcgccact ctgccaggct cccggccatc gccgccttg tgcgcgcgcc A  gccagctctt tgcgcgcgcg gggccgcgcg ccgcgggctc agggcagacc atgcgcgcgc  caagtccgct gccgcgcgcg ggcctatgct tgctggcagg cgccctcgcc tgggcccctg  ggcgggcggg cggccaggcg gccaggctgc aggaggagtg tgactatgtg cagatgatcg  aggctcagca caagcagtcg ctggaggagg ccagctcga gaatgagaca ataggctgca  gcaagatgtg ggacaacctc acctgtggc cagcaacctc tgggggccag gtagttgtct  tggcctgtcc cctcatcttc aagctcttct cctccatca agcccgcaat gtaagccgca  gctgcaccga cgaaggctgg acgcacctgg agcctggccc gtaccccat gctgtggtt  tggatgacaa ggcagcgagt ttggatgagc agcagacctt ttctacggt tctgtgaaga  ccggctacac catgggtac ggcctgtccc tcgccacct tctgtgcgc acagctatcc  tgagcctgtt caggaaagctc cactgcacgc ggaactacat ccacatgcac ctcttcata  ccttcacct gagggctgc gctgtcttca tcaaaactt ggcctcttc gacagcggg  agtgcggacca gtgctccgag ggctcgtgtg gctgtaaggc agccatggtc tttttccaat  attgtgtcat ggctaaactc ttctggctgc tgggtggagg cctctacctg tacacctgc  ttgccgtctc cttcttctct gagcgggaagt acttctgggg gtacatactc atcgggtggg  gggtacccag caccatcac atgggtgtgga ccacgcacag gatccatctt agggattatg  gggtcgtggga caccatcaac tctcactgt ggtgatcat aaggggcccc atcctcacct  ccatcttgtt aaacttcate ctgtttattt gcatctccg aatcctgctt cagaaactgc  ggccccaga taccaggaag agtgacagca gtccatactc aagctagcc aggtccacac  tcctgtgat cccctgttt ggagtacact acatcatgtt cgccttctt ccggacaatt  ttaaagcctga agtgaagatg gtctttgagc tcgtctgggg gtctttccag ggttttgtg  tggctatcct ctactgcttc ctcaatggtg aggtgcaggc ggagctgagg cggaaagtgc  ggcgtgggca cctgcagggc gtccctgggt ggaaccccaa ataccggcac ccgtcgggag  gcagcaacgg cgcacagtgc agcacgcagg ttccatgct gaccgcgctc agcccaggtg  cccgcgctc ctcagcttc caagccgaag tctcctggt ctgaccacca ggatccagg  ggcccaaggc ggccctccc gcccttccc actcaccgc gcaagcgcg gggacagagg</p>	Homo sapiens

469	159973 Vasoactive Intestinal Polypeptide Receptor 1	NP_004615.2	<p>cctgccccgg cgcgcccgag cccggccctg ggctcggagg ctgccccggg cccctgggtc tctggtcggg acactcctag agaagcgagc cctagagcct gcctggagcg tttctagcaa gtgagagaga tgggagctcc tctcctggag gattgcaggt ggaactcagt cattagactc ctcctccaaa ggcctccctac gcaatcaag ggcaaaaagt ctacatactt tcactctgac tctgccccct gctggctctt ctgcccattt ggaggaaagc accggtgga tctcaaaaca acactgggtg gacctgaggg cagaaaggtt ctgccccggg aagtcacca gcaccaaac cacggtagtg cctgaaattt caccattgct gtcaagttcc ttgggttaa gcattaccac tcaggcattt gactgaagat gcagtcact accctattct ctcttacgc ttagttatca gctttttaaa gtgggttatt ctggagtttt tgtttggaga gcacacctat cttagtggtt ccccaccgaa gtgactggc cctgggtgca gctgggtggg aggaaggtgc aaccaaagga ctgagggact ctgaagcctc tgggaaatga gaagcgagcc accagcgaat gtaggtctc ggactaagcc tacctgctct ccaagtctca gtggcttcac ctgtcaagtg gcatctgtca caccagccat acttatctct ctgtgctgtg gaagcaaacg gaatcaagag ctgcccctct tgtccacca cctatgtgcc aactgttgta actaggctca gagatgtgca cccatgggct ctgacagaaa gcagataacct caccctgcta cacatacagg attggaactc agatctgtct gataggaatg tgaagcacg gactcttact gctaaacttt gtgtatcgta accagccaga tcctcttggt tatttgttta ccaattgtat tattaatgcc attatctga attccccctg ccacccacc ctccctggcg tgtggctgag gaggcctcca tctcatgtat catctggata ggagcctgct ggtcacagcc tctctgtct gcccttcacc ccagtggccca ctacagctcc taccacacc tctgccagaa gatccccctca ggactgcaac aggctgtgac aacaataat gttggttgg a</p>	Homo sapiens
470	160040 Vasoactive Intestinal Polypeptide Receptor 2	NM_003382	<p>MRPPSPLPAR WLCVLGALA WALGPAGQA ARLOEECDYV QMIEVQHQC LEEAQLNET P IGCSRMWDNL TCWPAFPRGQ VVVLACPLIF KLFSSIQGRN VSRCTDEGW THLEPGYPI ACGLDDKAAS LDEQTMFYG SVKTYTIGY GLSLATLLVA TAILSLFRKL HCTRNYIHMH LFISFILRAA AVFIKDLALF DSGESDQCE GSVGCKAAMV FFQYCVMANF FWLLVEGLYL YTLAVSFFS ERKYFWGYIL IGWGPSTFT MWTIARIHF EDYGCWDTIN SSLWIIKGP ILTSILVNFI LFICIRILL QKLRPPDIRK SDSSPYSRLA RSTLLIPLF GVHYIMFAFF PDNFKPEVKM VFELVVGSFQ GFVVAILYCF INGEVQAEIR RKWRRWHLQG VLGWNPKYRH PSGGSNGATC STQVSNLTRV SPGARRSSF QAEVSLV</p> <p>cgggacgagg ggcgcccccc cgcgctcggg gcgctcggct acagctgcgg ggcccagggt A ctccgcgac tcgctccccg cccatgctgg agcgcgcgga acccggggga cctaggacgg aggcgcgagg cgctggcgcg cccccggac gctgagctcg ggatcgagc gctgctgct cccgcgctgc tgacctgctg gctgctgccc cccgtgaaca gcattcaccc agaatgccc tttcatctgg aaatacagga ggaagaaaca aaatgtacag agcttctgag gtctcaaaaca gaaaaacaca aagcctgcag tggcgtctgg gacaacatca cgtgctggcg gcctgccaat gtgggagaga ccgtcacggt gccctgcccc aaagtctca gcaattttta cagcaaaagca ggaacataa gcaaaaactg tacgagtac ggatggtcag agacgttccc agatttcgtc gatgcctgtg gctacagcga cccggaggat gagagcaga tcacgtttta tattctggtg aaggccattt ataccctggg ctacagtgc tctctgagt ctcttgcaac aggaagcata attctgtgcc tcttcaggaa gctgcactgc accaggaatt acatccacct gaacctgtc ctgtccttca tcttgagagc catctcagtg ctggtcaagg acgacgttct ctactccagc</p>	Homo sapiens

471	160040 Vasoactive Intestinal Polypeptide Receptor 2	NP_003373.1	<p>tctggcacgt tgcactgccc tgaccagcca tctctctggg tgggctgcaa gctgagcctg gtcttctctg agtactgcat catggccaac tctctctggc tgtggtgga gggctctac ctccacaccc tctggtggc catgctccc cctagaagt gcttctctggc ctacctctg atcgatggg gctccccac cgtctgcatc ggtgcatgga ctggcgccag gctctacta gaagacaccg gttgctgga taaaaacac cacagtgtgc cctggtgggt catacgaata cgaatttaa ttccatcat cgtcaatttt gtcctttca ttagtattat acgaatttg ctgcagaagt taacatcccc agatgtcgcc ggaacgacc agtctcagta caagaggtg gcaaagtcca cgtctctgct tatcccgctg ttccgctgct actacatggt gtttgcctg tttccatca gcatctctc caaataccag atactgttg agctgtgct cgggtcgttc caggcctgg tgtggcctg cctctactgt ttcttgaaca gtgagtgca gtgcagctg aagcaaaaat ggcgaagccg gtgcccagcc cgtcccgga gccgggatta cagggtctg ggttctctct tctccacaa cggctcgag gtcatctag cccacccctg cctgtcgac gcccagtcct tctgcaaac ggagacctg gtcatctag cccacccctg cctgtcgac gcggcgagg gccacggtt cgggctctt cggggctga gacgcggct tctctcttc agatgcccga gcaccgtgtc gggcaggtca gcgctgct gactccgta agctggtgt ccataaac ccatacctg</p>	Homo sapiens
472	160055 Motilin Receptor (GPR38)	NM_001507	<p>atgggagcc cctggaacgg cagcagcggc cccgagggg gcgaggagcc gccgtggccc A gcgtgccc cttgcgacga gcgcgctgc tgcctcttc cctgggggc gctggtgccc gtgaccgctg tgtgctgtg cctgtctgtc gtgggggtga gcggcaacgt ggtgaccgtg atgtgatcg ggcgtaccc ggacatgcgg accaccaca acttgacct gggcagcatg gccgtgtccg acctactcat cctgctcgg ctgcccctg acctgtacc cctctggcg tcggggccct ggtgttctg gccgtgctc tgcgcctg cctctactg ggcgagggc tgcacctacg ccacgtgct gcacatgacc gcgtcagcg tcgagcgta cctggccatc tgcggccgc tccgcccgg cgtcttggt accggcgcc gcgtccgcg gctcactgct gtgctctgg ccgtggcgt gctctgccc ggtccctct tgttctggt gggcgtcgag caggacccc gcatctcct agtcccgcc ctaaatgga ccgcgggat cgcctctcg cctctgct cgtcgccgc tctctgctc tgcggggcg aatgcggcc gagccccg ggccccga ccgcgaggc cggcgctg ttacgcccg gacccccg cctgctctt cagctggcg cgtgctgt catgtgtggt gtaccaccg cctactctt cctgctctt ctgtgctca gcatcctca cgggtcctc gggcgggag tgtgagcag ccggcgccg ctgcgagcc cggccgctc gggcgggag agagggcacc gcgagacct cgcgtctg ctggtggtg tctggcatt tataattgc tgggttgcct tccacgttg cagaatcatt tacataaaca cggaagattc gcggatgat tacttctctc agtactttaa catcgtcgt</p>	Homo sapiens



473	160055 Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aaccaatcc tctacaacct catttcaag aagtacagag cggcgccctt taaactgctg ctgcgaagga agtccaggcc gagaggcttc cacagaagca gggacactgc gggggaagt gaggggaca ctggaggaga cacggtgggc tacacaga caagcgtaa cgtgaagacg atgggataa MLIGRYRDMR TTTNLYLGS AVSDLLILG LPFDLYLWR SRWVFGPLL CRLSLYVGE CTYATLLHMT ALSVERYLAI CRPLRARVLV TRRRVRLIA VLMVALLSA GPFLFLVGV QDPGISVVP LNTARIASS PLASSPPLWL SRAPPPSPS GPETAFAAL FSRECRPSPA QLGALRVMLW VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGPAAAGRE RGRQTVRL LIVVLAFLIC WLPFHVGRIL YINTEDSRNM YFSQYFNIVA LQLFYLASI NPILYNLISK KYRAAFAKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggacctgc ccccgagct ctctctggc ctctatgtg cgcctttgc gctggcttc A ccgctcaacg tcttgccat ccgaggcgc agggccacg ccggctccg tctacacct agcctggtct acgcccgtga cctgggctgc tccgacctgc tgcagacgt ctctgccc ctgaaggcgg tggaggcgt agcctccgg cctggcctc tggggcttc gctgtgccc gtcttcggcg tggcccact ctcccactc tatgcggcg ggggcttct ggcgcctg agtgcaggcc gctacctggg agcagcctc ccttgggtg acaagcctt ccggaggcg tgctattcct ggggggtgtg cgcggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctcc aggaggctgg ctggaccaca gaacacctc cctgggcatc aacacaccgg tcaacggctc tccggtctgc ctggaggcct gggaccggc ctctgccc cggcccgtc tcaagcctc tctcctgctc ttttctgct ccttggcct cacagcctc tgctacgtgg gctgctccg ggcactggcc cgtccggcc tgacgcacg gcggaagctg cgggcgcct ggttgcccg cggggccctc ctacgctgc tgcctgctg agaccctac aacgcctcca acgtggccag ctctcctgac cccaatctag gaggctcctg gcggaagctg gggtccatca cgggtgctg gagtgtgtg cttaatccg tggtagccg ttacttggga aggggtcctg gctgaagac agtgtgtgctg gcaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
474	160059 G Protein- coupled Receptor GPR40	NM_005303	atggacctgc ccccgagct ctctctggc ctctatgtg cgcctttgc gctggcttc A ccgctcaacg tcttgccat ccgaggcgc agggccacg ccggctccg tctacacct agcctggtct acgcccgtga cctgggctgc tccgacctgc tgcagacgt ctctgccc ctgaaggcgg tggaggcgt agcctccgg cctggcctc tggggcttc gctgtgccc gtcttcggcg tggcccact ctcccactc tatgcggcg ggggcttct ggcgcctg agtgcaggcc gctacctggg agcagcctc ccttgggtg acaagcctt ccggaggcg tgctattcct ggggggtgtg cgcggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctcc aggaggctgg ctggaccaca gaacacctc cctgggcatc aacacaccgg tcaacggctc tccggtctgc ctggaggcct gggaccggc ctctgccc cggcccgtc tcaagcctc tctcctgctc ttttctgct ccttggcct cacagcctc tgctacgtgg gctgctccg ggcactggcc cgtccggcc tgacgcacg gcggaagctg cgggcgcct ggttgcccg cggggccctc ctacgctgc tgcctgctg agaccctac aacgcctcca acgtggccag ctctcctgac cccaatctag gaggctcctg gcggaagctg gggtccatca cgggtgctg gagtgtgtg cttaatccg tggtagccg ttacttggga aggggtcctg gctgaagac agtgtgtgctg gcaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
475	160059 G Protein- coupled Receptor GPR40	NP_005294.1	MDLPPQLSFG LYVAAFALGF PLNVLAIRGA TAHAPRLRTP SILVYALNLGC SDLLLTVSLP P LKAVEALASG AWPLPASLCP VFAVAHFPL YAGGFLAAL SAGRYLGAAP PLGYQAFRRP CYSWGVCAAI WALVLCGLGL VFGLEAPGGW LDHSNTSLGI NTPWNGSPVC LEAWDPASAG PARFSLSLLL FFLPLAITAF CYVGCLRALA RSLTHRRKL RAAWVAGGAL LTLLLCVGPY NASNVASFLY PNLGGSWRKL GLITGWSVV LNPVLTGYLG RGPGLKTVC AARTQGKSQK atgcacaccc tggctacgtc cggaccacac ggtcctggtg gggaccggc caacgctcc A ggctgccccg gctgtggcg caacgctcg gaggccacg tccctcgcc gcgggcccgtg gacgctggc tctgcccgt ctcttcgcg gctgtatgc tgcgtggcct ggtgggaac tgcgtggtca tctacgtcat ctgcgccac aagccgatgc ggaccgtac caactctac atcgccaaac tggcggccac ggacgtgacc tctctcctg gctgcgtcc cttcacggcc ctgctgtacc cgtgcccgg cgtgtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcgtgtga gcccagctgt gccacttga ccgccatgag tgtggaccgc tggtagctga cgggtgtccc gttgcccgc ctgcaccgc gcacgcccc cctggcgctg gctgtcagcc tcagcatctg gtaggctct gggcggtgt ctgcgcccgt gctgcctg	Homo sapiens
476	160189 G Protein- Coupled Receptor GPR54	NM_032551	atgcacaccc tggctacgtc cggaccacac ggtcctggtg gggaccggc caacgctcc A ggctgccccg gctgtggcg caacgctcg gaggccacg tccctcgcc gcgggcccgtg gacgctggc tctgcccgt ctcttcgcg gctgtatgc tgcgtggcct ggtgggaac tgcgtggtca tctacgtcat ctgcgccac aagccgatgc ggaccgtac caactctac atcgccaaac tggcggccac ggacgtgacc tctctcctg gctgcgtcc cttcacggcc ctgctgtacc cgtgcccgg cgtgtgctg ggcacttca tgtgcaagt cgtcaactac atccagcagg tctcgtgtga gcccagctgt gccacttga ccgccatgag tgtggaccgc tggtagctga cgggtgtccc gttgcccgc ctgcaccgc gcacgcccc cctggcgctg gctgtcagcc tcagcatctg gtaggctct gggcggtgt ctgcgcccgt gctgcctg	Homo sapiens

477	160189 G Protein- Coupled Receptor GPR54	NP_115940.1	caccgctgt caccggggc gcgcgctac tgcaagtgg ccttcccag cgcgcccgtg gagcgcct tgcactgta caacctgtg gcgctgacc tgcgtccgt gctcgccacc tgccctgt atgcggccat gctgcgccac ctgggcggg tgcgctgctg ccccgccccc gccgatagc cctgcaggg gcaggtgctg gcagagcgc caggcccggt gcgggccaag gtctcgccg tgggggggc cgtggctctg ctcttcgctg cctgctggg cccatccag ctgttcctgg tgctgaggc gctggggccc gcgggctctt ggcaccacg cagctacgac gcctacggc ttaagacctg ggtcactgc atgtctaca gcaactcgc gctgaacctg ctgctctag ccttcctgg ctcgcactt cgcagacct cccgcccgt ctgccccctg gcgcggccc gcccgcggc ccccgcggc cccgacct cggaccccg agccccac gcggagctg accgctggg gtcccaccc gcccgcgaa gggcgagaa gccaggagc agtggctgg ccgcggcgg gctgtgctc ctggggagg acaacgccc tctctga MHTVATSGPN ASWGAPANAS GCPGCGANAS DGPVPSRAV DAWLVLFFA ALMLGLVGN P SLVIYVICRH KPMRTVTNFEY IANLAATDVT FLCCVPFTA LLYPLPGWVL GDFMCKFVNY IQQVSQATC ATLTAMSVDR WYTVFPLRA LHRRTPLAL AVSLSIWVGS AAVSAPVLAL HRLSPGPRAY CSEAFPSRAL ERAFALYNLL ALYLLPLLAT CACVAAMLRH LGRVAVRPAP ADSLQGVVL AERAGAVRAK VSRLVAANVL LFAACWGPQ LFLVLQALGP AGSWHPRSVA AYALKTWIHC MSYNSALNP LLYAFLGSHF RQAFRRVRPRR PGPSPDPAAPH AELHRLGSHP APARQKPGS SGLAARGLCV LGEDNAPL CGGGGCCAC GTGCCTGCTG CTGCGCGCCT ACCTGATCGC GCATGTCTCAT GCACTGGCTG A ACCTATCATG AGACCTGCT GCTGCTACA CTGTATGAA CCCACATCTG CTACACTGC CACCTGGTAC CAACGCTCT ACTTCTTCTA TGATGCTATC TGACTGCTGC TACATGCTAG ACTGCGCTAT TCACCGATC CTTGACAACT TTATCAGCCA GACTGCCGGG GCGGGCTGCG ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGG GCACATGCGC CTCCTCTTCC TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGTG ATAGCCAGAC TGCTGCGAGC AACCCGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTCGCTC GCAAAGACTT GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgagggg A ctcccaaggg aaactcaggc gctgtctggt cccaatgtca gtgaaccca gctggggcc tgccccctcg gaggggtca ccgcaagtgc taccagtgac cttggagaga tccacaactg gaccgagctg cttgacctct tcaaccacac ttgtctgag tgccacgtgg agctcagcca gagcaceaa cgtgtgtgct tcttgccct ctacctgccc atgtttgtg ttgggctggt ggagaacctc ctggtgat tgcgtcaact gcgcggtcga ggcggggcag ggtgatgaa cctctacatc ctcaacatgg ccatcgcca cctgggcat tgcctgtctc tgcccgtg gatgctggag gtcagctgg actacacct gctctggggc agcttctctc gcgcttcac tcaactctc tactttgtca acatgtatag cagcatttc ttcctggtgt gcctcagtg cgaccgctat gtcacctca ccagcgctc cccctctctg cagcgttacc agcaccgagt gcggggggcc atgtgtgag gcatctgggt cctctcgcc atcatcccg tgcctgaggt ggtccacatc cagctggtgg agggccctga ccttcctg ccttcctg cacttttga aacgtacagc acctggggcc tggcggtggc cctgtccacc acctctgt gcttcctgt gcccttccct ctcacacag tcttcaatgt gctgacagcc tgcgggctgc ggcagccag acaacccaag agcggggc actgcttctg gctgtggcc tacttgtcat	Homo sapiens
478	162022 Adrenomedull in Receptor (ADMR)	IG6564	CGGGGCCAC GTGCCTGCTG CTGCGCGCCT ACCTGATCGC GCATGTCTCAT GCACTGGCTG A ACCTATCATG AGACCTGCT GCTGCTACA CTGTATGAA CCCACATCTG CTACACTGC CACCTGGTAC CAACGCTCT ACTTCTTCTA TGATGCTATC TGACTGCTGC TACATGCTAG ACTGCGCTAT TCACCGATC CTTGACAACT TTATCAGCCA GACTGCCGGG GCGGGCTGCG ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGG GCACATGCGC CTCCTCTTCC TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGTG ATAGCCAGAC TGCTGCGAGC AACCCGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTCGCTC GCAAAGACTT GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgagggg A ctcccaaggg aaactcaggc gctgtctggt cccaatgtca gtgaaccca gctggggcc tgccccctcg gaggggtca ccgcaagtgc taccagtgac cttggagaga tccacaactg gaccgagctg cttgacctct tcaaccacac ttgtctgag tgccacgtgg agctcagcca gagcaceaa cgtgtgtgct tcttgccct ctacctgccc atgtttgtg ttgggctggt ggagaacctc ctggtgat tgcgtcaact gcgcggtcga ggcggggcag ggtgatgaa cctctacatc ctcaacatgg ccatcgcca cctgggcat tgcctgtctc tgcccgtg gatgctggag gtcagctgg actacacct gctctggggc agcttctctc gcgcttcac tcaactctc tactttgtca acatgtatag cagcatttc ttcctggtgt gcctcagtg cgaccgctat gtcacctca ccagcgctc cccctctctg cagcgttacc agcaccgagt gcggggggcc atgtgtgag gcatctgggt cctctcgcc atcatcccg tgcctgaggt ggtccacatc cagctggtgg agggccctga ccttcctg ccttcctg cacttttga aacgtacagc acctggggcc tggcggtggc cctgtccacc acctctgt gcttcctgt gcccttccct ctcacacag tcttcaatgt gctgacagcc tgcgggctgc ggcagccag acaacccaag agcggggc actgcttctg gctgtggcc tacttgtcat	Homo sapiens
479	162022 Adrenomedull in Receptor (ADMR)	NM_007264	CGGGGCCAC GTGCCTGCTG CTGCGCGCCT ACCTGATCGC GCATGTCTCAT GCACTGGCTG A ACCTATCATG AGACCTGCT GCTGCTACA CTGTATGAA CCCACATCTG CTACACTGC CACCTGGTAC CAACGCTCT ACTTCTTCTA TGATGCTATC TGACTGCTGC TACATGCTAG ACTGCGCTAT TCACCGATC CTTGACAACT TTATCAGCCA GACTGCCGGG GCGGGCTGCG ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGG GCACATGCGC CTCCTCTTCC TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGTG ATAGCCAGAC TGCTGCGAGC AACCCGCCAC CCTGCAGCCA AGCCTGAGCT TTCAGGCACA CCATTCGCTC GCAAAGACTT GCGCCATGTG TCCCACTCAG TGTCTTACAC CCAGCTGAGG T cagcctctc acagctccc atagcctgga cctgcggcc ctcctccag gaccgagggg A ctcccaaggg aaactcaggc gctgtctggt cccaatgtca gtgaaccca gctggggcc tgccccctcg gaggggtca ccgcaagtgc taccagtgac cttggagaga tccacaactg gaccgagctg cttgacctct tcaaccacac ttgtctgag tgccacgtgg agctcagcca gagcaceaa cgtgtgtgct tcttgccct ctacctgccc atgtttgtg ttgggctggt ggagaacctc ctggtgat tgcgtcaact gcgcggtcga ggcggggcag ggtgatgaa cctctacatc ctcaacatgg ccatcgcca cctgggcat tgcctgtctc tgcccgtg gatgctggag gtcagctgg actacacct gctctggggc agcttctctc gcgcttcac tcaactctc tactttgtca acatgtatag cagcatttc ttcctggtgt gcctcagtg cgaccgctat gtcacctca ccagcgctc cccctctctg cagcgttacc agcaccgagt gcggggggcc atgtgtgag gcatctgggt cctctcgcc atcatcccg tgcctgaggt ggtccacatc cagctggtgg agggccctga ccttcctg ccttcctg cacttttga aacgtacagc acctggggcc tggcggtggc cctgtccacc acctctgt gcttcctgt gcccttccct ctcacacag tcttcaatgt gctgacagcc tgcgggctgc ggcagccag acaacccaag agcggggc actgcttctg gctgtggcc tacttgtcat	Homo sapiens

480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	MSVKPSWGGP PSEGTVAVPT SDLGEIHNWT ELIDLFNHTL SECHVELSQS TKRVVLFALY P LAMFVVGGLVE NLLVICVNR GSGRAGLNL YILNMAIADL GIVLSLPVWM LEVTDYTWL WGSFSCRFTH YFYFNMYS IFFLVCLSD RYVTLTSASP SWQRQHRVR RANCAGIWL SAIIPLEVV HIQVEGPEP MCLFMAFFET YSTWALAVAL STTILGFLLP FPLITVFNVL TACRLRQPGQ PKRRHCLLL CAYVAVFVMC WLPYHVITLL LTLGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NELSPHFRGR LLNAVHVILP KDQTKAGTCA SSSSCSTQHS IIITKGDSP AAAAPHPEPS LSFQAHLHP NTSPISPTQP LTPS	Homo sapiens
481	160204 G Protein-Coupled Receptor RTA	atgagggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tattttccaa ggctcgggc cgcgctcggc gctggcctgc tgccccggcg ggctccggcg ccggaggcgg gagtccagg aagagccctc caaaaagga ggctcggcg gatcaggaca gctgcaggtg ggtgtcaga ctggtgagct gccagcagg gccagacgc gccaggcctg gagatggctg gaaactgctc ctgggagggc catcccgga caggaaacag gatgtgccct ggcctgagcg agggcccgga actctacagc cggggcttcc tgaccatcga gcagatcgcg atgctgcgc ctcggccgt catgaactac atcttctgc tctctgcct ggtggcctg gtgggaacg ggtgggtctc ctggttttcc ggcttctcca tcaagaggaa ccccttctcc atctacttc tgaactggc cagcccgat gtgggtacc tcttcagaa ggcggtgttc tccatcctga acacgggggg ctctctggc agtttggcg actacatccg cagcgtgtgc cgggtcctgg gctctgcat ctccccgc ttctcttacc ggctgagcc tctgccccg cgtcagcgc gagcgtgcg ctcgggtcat ctccccgc ttctcttacc ttgtactggc gccggcgcc ccaagcctg tcggccgtgg tgtgcctt gctgtgggtc ctgtccctcc ttgtcacctg cctgcacaac tacttctgg tgttctggg ccgcggggc cccggcgcg cctgcaggca catggacatc ttcctgggca tctctctgt cctgctctgc tgcccgctca tgggtgctgc ctgctggcc ctcctcctgc acgtggagt cggggcccg cggcgccagc gctctgcaa gctcaaccac gtcctcctgg ccatggtctc cgtcttctc gtgtcttcca tctacttagg gatcgactgg ttctcttctt ggtcttcca gatccggcc ccttccccg agtacgtcac tgacctgtgc atctgcatca acagcagcg caagcccat gtctacttc ttgccccggg ggacaagtgc cagcgtgtgt gggagcct cagggtgttc ttccagcgg ccttgcggga cggcgtgag ctgggggagg ccggggggcag cagcccaac acagtcacca tggagatgca gtgtccccg gggaacccct cctgagactc cagcgcctgg aggaggcagg ggcaggaaag ggcctccaa acctctgcc ttgggacagg aatgggcacc tgcttctgag tccatacagg agaagaaaga tctgttctct cctctgggc ctcttctcc ctggctggg gactccagg gtggctggga gactgggag ccaccagcaa acagacctgt ggcctctgcc cggctcccc accattctg ctccccctaga gacctctgt acagaagtgt cccccagggt gtggggcccc tcttgcct aggctggttg gtaaaagaga ggaggtcaac acccagccta gccacctctg cctcttggt	Homo sapiens

482	160204 G Protein- Coupled Receptor RTA	CAC39840.1	<p>cagccctcct tgactgtgtc ccagccagca ccaggccagc agcctcatcc ctgccattca  gggtgttcc agagattcga tctcttaag gcattatcag tgagcaaatg tgaaggaat  gggtgtcga agaaagtctt ggtcacatg ccttgtagt agtcttctt gcaacaacc  tcccttccc ccgtcgagtc atttggtgac ttgatgggg ggattcttg ttatgtcaag  gctctggaga caggaaggcc ctttggccgc cttgggtagt tgacctgct tttctgactc  cgggacgagc cagtcctagg ctgctccgg gaggacttga ggtatccgc agccatgag  gaccactgg cagctcctg gacagcctt tggctccag cccaccga aagtggacac  tggtccgcc ctggccact ggggactgg actgtgtgc acagtggcc aatgtggcca  acggaagtt tataaagac aaaaagtata tcaataaaca tttataact tgc  MAGNCSWEAH PGNRNRMPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLLCLCLGLV P  GNGLVWFFG FSIKRNPSI YFLHLASADV GYLFSKAFVS ILNTGGFLGT FADYIRSVCR  VLGLCMFTG VSLPAVSAR RCASVIFPAW YWRRRPKRIS AVVALLMWL SLIVTCLHNY  FCVFLGRGAP GAACRHMDIF LGILLFLCC PIMVLPCLAL ILHVECRARR RORSAKLNHV  ILAMVSFLV SSIYLGIDWF LEWVFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ  RLWEPLRVVF QALRDGAEL GEAGGSTPNT VTMEMQCPG NAS</p>	Homo sapiens
483	160206 G Protein- Coupled Receptor GPR32	NM_001506	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtga caaaccctgg ggtcctgaca A  cgtgacgct cttgttccag gaagatgaac tctccggat gcctgtctga ggaggtggg  tccctccgc cactgactgt ggttatcctg tctcgctcca ttgtgctcg agtgcctggc  aatgggtgg tgctgtggat gactgtcttc cgtatggcac gcaaggtctc caccgtctgc  ttcttccacc tggcccttgc cgatttcatg ctctcactgt cctgccccat tgcctatgtac  tatattgtct ccaggcagtg gctcctcggg gagtgggctt gcaaacctca catcaccttt  gtgttccca gctactttgc cagtaactgc ctcttctct tcatctctgt ggaccgttgc  atctctgtcc tctacccctg ctgggcccctg aaccacgca ctgtgcagcg ggagagctgg  ctggcccttg ggtgtgtgct cctggccgc gccttctgct ctgcgcacct gaaatcccg  acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaatgag  actgcccaga tttggattga aggggtcgtg gaggacaca ttatagggac cattggccac  ttcctgctgg gcttctcggg gcccttagca atcataggca cctggccca cctcatccg  gccaagctct tgcgggagg ctgggtccat gccaaccggc ccaagaggct gctgtggtg  ctggtgagcg cttcttttat ctctgtgtcc ccgtttaacg tgggtgtgtt ggtccatctg  tggcgacggg tgatgctcaa ggaatctac caccocgga tctgtctcat cctccagct  agctttgct tgggtgtgt tttccagtc caacagcagc ctcaacccct tctctacgt cttcgttggc  agagatttcc aagaaaagt tttccagtc ttgacttctg cctggcgag ggcgttggga  gaggagagt tctgtctac ctgtccctg ggcaacccc cccgggaatg a  MNGVSETRG CSDRQPGVLT RDRCSRKMN SSGCLSEVG SLRPLTVVIL SASIVGVLG P  NGLVLMTVF RMARTVSTVC FFHLALADEM LSLSLFIAMY YIVSRQWLLG EWACKLYITF  VFLSYFASNC LLVFLSVDRS ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR  TTRKWNCGTH CYLAFNSDNE TAQIWIEGV EGHIIIGTGH FLLGLGLPLA IIGTCAHLIR  AKLLREGVWH ANRPKRLLLV LVSAFFIFWS PFNVVLIVHL WRRVLMKEIY HPRMLLILOA  SFALGCVNSS LNPLYVFGV RDFQEKFFQS LVSALARAAG EEEFLSSCPR GNAPRE  cagcctccct cttccacctc tgtctgccc tgctctctt tctagctgct gtcaggagct A  gactgcctcc agggctggaa tctgtgtc cctctgtgcc cagagcccca cgtgtcggc</p>	Homo sapiens
484	160206 G Protein- Coupled Receptor GPR32	NP_001497.1	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtga caaaccctgg ggtcctgaca A  cgtgacgct cttgttccag gaagatgaac tctccggat gcctgtctga ggaggtggg  tccctccgc cactgactgt ggttatcctg tctcgctcca ttgtgctcg agtgcctggc  aatgggtgg tgctgtggat gactgtcttc cgtatggcac gcaaggtctc caccgtctgc  ttcttccacc tggcccttgc cgatttcatg ctctcactgt cctgccccat tgcctatgtac  tatattgtct ccaggcagtg gctcctcggg gagtgggctt gcaaacctca catcaccttt  gtgttccca gctactttgc cagtaactgc ctcttctct tcatctctgt ggaccgttgc  atctctgtcc tctacccctg ctgggcccctg aaccacgca ctgtgcagcg ggagagctgg  ctggcccttg ggtgtgtgct cctggccgc gccttctgct ctgcgcacct gaaatcccg  acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaatgag  actgcccaga tttggattga aggggtcgtg gaggacaca ttatagggac cattggccac  ttcctgctgg gcttctcggg gcccttagca atcataggca cctggccca cctcatccg  gccaagctct tgcgggagg ctgggtccat gccaaccggc ccaagaggct gctgtggtg  ctggtgagcg cttcttttat ctctgtgtcc ccgtttaacg tgggtgtgtt ggtccatctg  tggcgacggg tgatgctcaa ggaatctac caccocgga tctgtctcat cctccagct  agctttgct tgggtgtgt tttccagtc caacagcagc ctcaacccct tctctacgt cttcgttggc  agagatttcc aagaaaagt tttccagtc ttgacttctg cctggcgag ggcgttggga  gaggagagt tctgtctac ctgtccctg ggcaacccc cccgggaatg a  MNGVSETRG CSDRQPGVLT RDRCSRKMN SSGCLSEVG SLRPLTVVIL SASIVGVLG P  NGLVLMTVF RMARTVSTVC FFHLALADEM LSLSLFIAMY YIVSRQWLLG EWACKLYITF  VFLSYFASNC LLVFLSVDRS ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR  TTRKWNCGTH CYLAFNSDNE TAQIWIEGV EGHIIIGTGH FLLGLGLPLA IIGTCAHLIR  AKLLREGVWH ANRPKRLLLV LVSAFFIFWS PFNVVLIVHL WRRVLMKEIY HPRMLLILOA  SFALGCVNSS LNPLYVFGV RDFQEKFFQS LVSALARAAG EEEFLSSCPR GNAPRE  cagcctccct cttccacctc tgtctgccc tgctctctt tctagctgct gtcaggagct A  gactgcctcc agggctggaa tctgtgtc cctctgtgcc cagagcccca cgtgtcggc</p>	Homo sapiens
485	160210 G Protein- Coupled	NM_004778	<p>atgaatgggg tctcgaggg gaccagaggc tgcagtga caaaccctgg ggtcctgaca A  cgtgacgct cttgttccag gaagatgaac tctccggat gcctgtctga ggaggtggg  tccctccgc cactgactgt ggttatcctg tctcgctcca ttgtgctcg agtgcctggc  aatgggtgg tgctgtggat gactgtcttc cgtatggcac gcaaggtctc caccgtctgc  ttcttccacc tggcccttgc cgatttcatg ctctcactgt cctgccccat tgcctatgtac  tatattgtct ccaggcagtg gctcctcggg gagtgggctt gcaaacctca catcaccttt  gtgttccca gctactttgc cagtaactgc ctcttctct tcatctctgt ggaccgttgc  atctctgtcc tctacccctg ctgggcccctg aaccacgca ctgtgcagcg ggagagctgg  ctggcccttg ggtgtgtgct cctggccgc gccttctgct ctgcgcacct gaaatcccg  acaaccagaa aatggaatgg ctgtacgcac tgctacttgg cgttcaactc tgacaatgag  actgcccaga tttggattga aggggtcgtg gaggacaca ttatagggac cattggccac  ttcctgctgg gcttctcggg gcccttagca atcataggca cctggccca cctcatccg  gccaagctct tgcgggagg ctgggtccat gccaaccggc ccaagaggct gctgtggtg  ctggtgagcg cttcttttat ctctgtgtcc ccgtttaacg tgggtgtgtt ggtccatctg  tggcgacggg tgatgctcaa ggaatctac caccocgga tctgtctcat cctccagct  agctttgct tgggtgtgt tttccagtc caacagcagc ctcaacccct tctctacgt cttcgttggc  agagatttcc aagaaaagt tttccagtc ttgacttctg cctggcgag ggcgttggga  gaggagagt tctgtctac ctgtccctg ggcaacccc cccgggaatg a  MNGVSETRG CSDRQPGVLT RDRCSRKMN SSGCLSEVG SLRPLTVVIL SASIVGVLG P  NGLVLMTVF RMARTVSTVC FFHLALADEM LSLSLFIAMY YIVSRQWLLG EWACKLYITF  VFLSYFASNC LLVFLSVDRS ISVLYPVWAL NHRTVQRASW LAFGVWLLAA ALCSAHLKFR  TTRKWNCGTH CYLAFNSDNE TAQIWIEGV EGHIIIGTGH FLLGLGLPLA IIGTCAHLIR  AKLLREGVWH ANRPKRLLLV LVSAFFIFWS PFNVVLIVHL WRRVLMKEIY HPRMLLILOA  SFALGCVNSS LNPLYVFGV RDFQEKFFQS LVSALARAAG EEEFLSSCPR GNAPRE  cagcctccct cttccacctc tgtctgccc tgctctctt tctagctgct gtcaggagct A  gactgcctcc agggctggaa tctgtgtc cctctgtgcc cagagcccca cgtgtcggc</p>	Homo sapiens

Receptor  
GPR44  
(CRTH2)

caacgccaca ctgaagccac tctgcccac cctggagcag atgagccgtc tccagagcca  
cagcaacacc agcatcgct acatcgacca cgcggccgtg ctgctgcacg ggtggccctc  
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gggctgggca gctaccattt cctttttgcg gatgggagg gtaacttgca cctctgacct  
atcacttcca ctgcacccc tctcattcct ccacctgcgc tggacttggg gtcagagact  
gctgtgtttg agctctgcag cccagggacc gaaaagtggg tgtcaatgaa tttgtcttgg  
tggatgaaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgtttt

486	160210 G Protein-Coupled Receptor GPR4 (CRTH2)	NP_004769.1	MSANATLKPL MRQTWTTWV LHLAISDLLA LLSAISLDR MCYNNVLLN PGRFVRLVAA PVLVLTCPD EPRGPARLL atgaatgaat gcgtccgagc atcttcgaga gttatctttg cagacgatgg cttctccact atctcagttc cttgcaataa tgcattattt gggaaacctg gcctatttta ttcacctact agagcccgat cgtcgctacg tatataattt ttaacaaact aacggcggtt tgtgtgaagg atttga	CPILQMSRL LHLAISDLLA LQVVRPWAQ PGPDRDATCN VVAAPALCWG MLRKLRRSLR GWLIGSCAAS ccaggtggac gtcactccctg cagtggttat ctttccattg catatgctga actccacagg taaaaaagtgt ccaagcctct tgatctggat gttaccatgg ctggctttat tccacatttt tccctagtca ccatggtttt actttcttct ggctttctct agaaagctcc agtaataagt cctccgaaga atcaggaagc acaagaaccc	QSHSNTSIRY SASLPFFTYF NHRVTAAAHK SRQAALAVSK PYHVFSLLEA TVLESVLVDD PQTGPLNRAL SSTSS tgaatggagg cccacttggg tgtgtgctg tgctccactg tcttttcgtt tgtccacagg tgtccacagg ttctatggca ttcctacaat ctactccctg tgacattttt gaatgggtgtg tgtttgctta caaaatttgc tgaggttagat gtttaggata agaaagctcc tggtaataagt cctccgaaga atcaggaagc aaacctagga	IDHAAVLHGH LAUGHSEWELG VCILVLAIAV FLIAFLVPLA RAHANPGLRP SELGGAGSSR PQTGPLNRAL SSTSS atcctgaaca tttggccact acatttctga ttactaccag ggagttagct gccttaacatt tgtctgtcctt tgctatggca caactgggtca ctaattttct gaatgggtgtg ctttatgctc cgtcagcaca tcttccagag accagtgtat cgggtcttgg ttttgtaact gtgtaataata caatgtgcac aacgggctaa ttcttgcctc	GVILFVVGCR PFELNMFASGF DTISRLDGR LRLQHRGRR SLAFFNSVAN ASPLALCSR GVILFVVGCR PFELNMFASGF DTISRLDGR LRLQHRGRR SLAFFNSVAN ASPLALCSR	Homo sapiens		
487	160212 G Protein-Coupled Receptor GPR52	NM_005684	atgaatgaat gcgtccgagc atcttcgaga gttatctttg cagacgatgg cttctccact atctcagttc cttgcaataa tgcattattt gggaaacctg gcctatttta ttcacctact agagcccgat cgtcgctacg tatataattt ttaacaaact aacggcggtt tgtgtgaagg atttga	ccaggtggac gtcactccctg cagtggttat ctttccattg catatgctga actccacagg taaaaaagtgt ccaagcctct tgatctggat gttaccatgg ctggctttat tccacatttt tccctagtca ccatggtttt actttcttct ggctttctct agaaagctcc agtaataagt cctccgaaga atcaggaagc aaacctagga	atcctgaaca tttggccact acatttctga ttactaccag ggagttagct gccttaacatt tgtctgtcctt tgctatggca caactgggtca ctaattttct gaatgggtgtg tgtttgctta caaaatttgc tgaggttagat gtttaggata agaaagctcc tggtaataagt cctccgaaga atcaggaagc aaacctagga	tgagcagtg acagtgtggt ttattgtctg atactaccag gcttgggtcc gcctgggtttt gcctcagtg cccttctgct tgccttccct caactgtctg ccactgtctg tgctcaccag agactggaca tttatatgct acaatccaac tctgtccttc gtgtaataata caatgtgcac aacgggctaa ttcttgcctc	cattgtgaat ggatgtctgc gaatctaaca ctatttcatt tactctgtca tggatataat ggatcagtg cattgagaat tcttggctg tgccttccct gctcaccagt tgctcaccag gtggtctccc tctgtccttc cagcctctcc atcctgtatg aacgtgtgac aacgggctaa ttcttgcctc	A	Homo sapiens	
488	160212 G Protein-Coupled Receptor GPR52	NP_005675.1	MNESRWTEWR VIFAFHCAPL ISVLKSVSMA GKPGYHGDIF RAREPSHEVD LTTWLAVSNS I	ILNMSSGIVN LHHYTTSYFI CLACISVDRI EMCATSWLTS SRRETHSPD FCNCVIYSL NGVFRGLRR	ASERHSCPLG QTMAYADLFV LAITKPLSYN AYFTGFIVCL RRYAMVLFRI TSVFYMLWLP LFTWCTSCM	FGHYSVDVVC GVSCIVPTLS QLVTPCLRRI LYAPAAFWVC TSVFYMLWLP YIIYFLLSS CVKDQEAQEP	IFETVIVLL LLHYSTGVHE CIIILWIYSC FTYFHFKIC RVLDNPTLSF YIIYFLLSS KPRKRANCS	TFLIAGNLT SLTCRVFGYI LIFLPSFFGW RQHTKEINDR RVLDNPTLSF YIIYFLLSS KPRKRANCS	P	Homo sapiens
489	160217 G Protein-Coupled	NM_005683	atgatgcagc accctacagt ttgcagtgcca	aaaaacaccag tggggagctgc catcccccacc	ctgtttgacg ttcgtcctgg gcctgctcct	gctgataaaa caacctgctg	A	Homo sapiens		

490	Receptor GPR55	160217 G Protein- Coupled Receptor GPR55	NP_005674.1	gcatccatg gcttcagcac cttccttaag aacaggtggc ccgattatgc tgcacacctc atctacatga tcaacctggc agtctttgac ctgctgtgtg tgcctccctt cccattcaag atggtcctgt cccaggtaca gtcccccttc ccgtccctgt gcacctgggt ggagtgcctt tacttcgtca gcatgtacgg aagcgtcttc accatctgct tcacagcat ggaccggttc ttggccatcc gttaccgct actggtgagc cactcggtc cccaggaag atctttggga cttgcatga caatctgggt cctggtgtgg accggaagca tccctatcta cagtttccat gggaaagtgg aaaaatacat tggcttccac acagtgtctg atgatactg gagcgccaa gtctcttcc cgctggaggt gtttggcttc ctccttccca tgggcatcat gggcttctgc tgtccaggga gcatccacat cctgctgggc cgccgagacc acaccaggga ctgggtgcag cagaaagcct gcatctacag catcgagcc agcctggctg tattcgtggt ctccttcctc ccagtcacc tgggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc agagccaaag agagcatcag cttcttcttg caattgtcca tgtgttctc caatgtcaac tgtgcctgg atgtttctg ctactacttt gtcatcaaa aattccgcat gaacatcagg gccacccgc cttccaggtt ccagctggtc ctgcaggaca ccacgatctc ccggggctaa IYMINLAVFD LLLVLSLPEK MVLQVQSPF PSLCTIVECL YFVSMYGSVF TICFISMDRE LAIRYPLLV HSGPPGRSLG SACTIWLVLW TGSIPYVSPH GKVEKYMCFH NMSDDTWSAK VFFPLEVFGF LLPMGIMGFC CSRSIHILLG RRDHTQDWVQ QKACIYSIAA SLAVFVVSFL PVHLGFFLQF LVRNSFIVEC RAKQSIISFFL QLSMCFNSVN CCLDFVCYYF VIKFRMNIR AHRPSRVQLV LQDTTISRQ	Homo sapiens
491	Receptor GPR35	160219 G Protein- Coupled Receptor GPR35	NM_005301	atgaatggca cctacaacac ctgtggctcc agcgaactca cctggccccc agcatcaag A ctgggtctct acgctactt gggcgtcctg ctggtgctag gctgtctgct caacagcctg gcgctctggg tgttctgctg ccgcatgcag cagtggacgg agaccgcat ctacatgacc aacctggcgg tggcgacct ctgcctgctg tgcacctgc ccttcgtgct gcactccctg cgagacact cagacacgcc gctgtgccag ctctccagg gcatctacct gaccaacagg tacatgagca tcagcctggt cagggccatc gccgtggacc gctatgtggc cgtgcggcac ccgctgcgtg ccgcggggt gccgtccccc aggcaggctg cggcgtgtgt cgcgggtcctc tgggtgctgg tcacggctc cctggtggtt cgtggctccc tggggtattca ggaaggcggc ttctgcttca ggagcaccgg gcacaaattc aactccatgc ggttcccgct gctgggattc tacctgcccc tggcgtggt ggtcttctgc tccctgaagg tggtagctgc cctggcccag aggccacca ccgacgtggg gcaggcagag gccaccgca aggetgccc catggctcgg gccaacctcc tgggttctgt ggtctgcttc ctgcccctgc acgtggggct gacagtgcgc ctcgagtgg gctggaacgc ctgtgccctc ctggagacga tccgtcgcgc cctgtacata accagcaagc tctcagatgc caactgctgc ctggagccca tctgctacta ctacatggcc aaggagtcc aggagcgctc tgcactggcc gtggctcccc gtgctaaggc ccacaaaagc caggactctc tgtgcgtgac cctgccttaa	Homo sapiens
492	Receptor GPR35	160219 G Protein- Coupled Receptor GPR35	NP_005292.1	MNGTYNTGGS SDLTWPPAIK LGFYAYLGLV LVLGLLNSL ALWVFCCRMQ QWTETRIYMT P NLAVADLCIL RDTSDTPLCQ LSQGIYTNR YMSISLVTAI AVDRYVAVRH PLRARGLRSP RQAARVCAVL WVIVIGSIVA RWLLGIQEGG FCFRSTRHNF NSMRPPLLGF YLPLAVVVFEC SLKVVTAQAQ RPPTDVQAE ATRKAARMW ANLLVFWVCF LPLHVGLTVR LAVGWNACAL LETIRRALYI TSKLSDANCC LDAICYMA KEFQFASALA VAPRAKAHKS	Homo sapiens

493	160221	G Protein- Coupled Receptor GPR27	NM_018971	QDSLCTILA	atggcgaaag cgagcgagcc ggtgagcagc ggcggcgagg aggcggcgcc cctgggcctc A aagctggcca cgtcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgag ctgctgatcg tgcgggagcg cagcctgcac cgcgcgccgt actacctgct gctcgacctg tgcttgcccg acgggctgcg cggcctgcgc tgcctccgag ccgtcatgct ggcggcgcgag cgtgcggcg cgcggcgagg ggcggcgccg ggcgcgctgg gctgcaagct gctcgccctc ctggccgcgc tctctgctt ccacgcgcgc tctcgtgctg tgggctgggg cgtcacccgc tacctggcca tgcgcacca cgccttctat gcagagcgcc tggcgggctg gccgtgcgc gccatgctgg tgtgcggcg cttggcgctg gcgctggccg cggcctccc gccagtgtg gacggcggtg gcgacgacga ggcgcgcgcg tgcgcctgg agcagcgcc cgcggcgcc ccggcgcg cttggcttct gctgctgctg gccgtggtgg tgggcggccac gcacctgctc tacctccgcc tgccttctt catccacgac cgcgcgaaga tgcggccgc gcgctggtg ccgcgcgca gccacgactg gacctccac ggcggcgcg ccaecggcca ggcggcgcc aactggacgg cgggcttcgg ccgcggggcc agccgcgcgc cgttgttggg catccggccc gcaggggcgg gccggcgcg cgcgcgcctc ctgctgtgg aagaattcaa gacggagaag aggctgtgca agatgttcta cgcgctcacg ctgctcttcc cgtctctg gggccctac gtcgtggcca gctacctg cttcgcgtg ggcctggtg cgcgcgcgc ccgtcccca ggcctacctg acggcctccg tgtgctgac cttcgcgcag gccgcgtatc acccgtcgt gtgcttctc ttcaacagg agctgaggga ctgcttcagg gccagttcc cctgctgcca gagccccgg accacccagg cgaccatcc ctgcgacctg aaagcattg gttatga MANASEPGS GGGEAAAGL KIALSLLLC VSLAGNVIFA LLIVRSLH RPYLLLDL P CLADGLRALA CLPVMIAAR RAAAAGAPP GALGCKLIATF DGGDEDEDAP CALEQRPDGA YLAIAHREY AERLAGWPCA AMLVCAAWAL ALAAFPVPL PAVSHDWFH GPGATGQAAA PGALGFLLLL AVVVGATHLV YRLFFIHD RRMRPARLV LVLEEFKTEK RLCKMFYAVT LLFLLWGPY NWTAGFGRGP TPPALVGI RP AGPGRGARRL TASWLTFAQ AGINPVVCFI FNRELRDCFR AQFPCCQSPR VWASYLRVIV RPGA VFPQAYL TASWLTFAQ AGINPVVCFI FNRELRDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
494	160221	G Protein- Coupled Receptor GPR27	NP_061844.1		atggtccctc acctttgt gctctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccggg cgcagcgagca ggcgcggag cgcggccctgg ccgtgcccac tgcctcgac ttcttctctt ggaacaacta cacttctcc gactgtgag acttgttgg caggagcg tacggcgctg agtccagaa cccacgggtg aaagccctgc tcatgtggc ttactcttc atcattgtct tctcactctt tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcact cggccaccag cctcttcac gtcaacctgg cagttgcca cataatgatc acgctgtcaca acacccctt cactttggtt cgttttgtga acagcacatg gatatttggg aagggcattg gccatgtcag ccgctttgcc cagtaactgt cactgcacgt ctcagcactg acactgacag ccattgcggt ggatcgccac caggtatca tgcacccctt gaaacccgg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tactccccc atgtatctg ccagaaatta ttacattca aatacagtga ggacattgtg cgctccctct gctgcccaga cttccctgag ccagctgacc tctctggaa gtacctggac ttggccacct tcatctgtct ctacatctctg ccctctctca tcatctctgt gccctacgct	Homo sapiens
495	160222	G Protein- Coupled Receptor GPR72	NM_016540		atggtccctc acctttgt gctctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccggg cgcagcgagca ggcgcggag cgcggccctgg ccgtgcccac tgcctcgac ttcttctctt ggaacaacta cacttctcc gactgtgag acttgttgg caggagcg tacggcgctg agtccagaa cccacgggtg aaagccctgc tcatgtggc ttactcttc atcattgtct tctcactctt tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcact cggccaccag cctcttcac gtcaacctgg cagttgcca cataatgatc acgctgtcaca acacccctt cactttggtt cgttttgtga acagcacatg gatatttggg aagggcattg gccatgtcag ccgctttgcc cagtaactgt cactgcacgt ctcagcactg acactgacag ccattgcggt ggatcgccac caggtatca tgcacccctt gaaacccgg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tactccccc atgtatctg ccagaaatta ttacattca aatacagtga ggacattgtg cgctccctct gctgcccaga cttccctgag ccagctgacc tctctggaa gtacctggac ttggccacct tcatctgtct ctacatctctg ccctctctca tcatctctgt gccctacgct	Homo sapiens



496	160222 G Protein- Coupled Receptor GPR72	NP_057624.1	<p>cgtgtggcca agaaactgtg gctgtgtaat atgattggcg atgtgaccac agagcagtac  tttgccttcg ggcgcaaaaa gaagaagacc atcaagatgt tgatgttgtt gtagtcctc  tttgcctctt gctggttccc cctcaactgc tacgtctccc tctgtcccag caaggtcatc  cgcaccaaca atgcctctta ctttgccttc cactggtttg ccatgagcag cacttgctat  aacccttcca tatactgctg gctgaacgag aacttcagga ttgagctaaa ggcattactg  agcatgtgtc aaagactctc caagcctcag gaggacggcg aacctcccc agticcttcc  ttcaggggtg cctggacaga gaagaatgat ggcagagggg ctcccttgc caataacctc  ctgccacct cccaaactcca gtctgggaag acagacctgt catctgtgga acccattgtg  acgatgagtt agaagaggtt gggaagaggg agtgggaggg gctgtctccc acctgagga  gggaaagaga gctattctc acacatgac ttcagagtgc tggaaacaca ctctgcaga  aggctgtagg actcttgaat tcttaggaaa ctgtccagcc tcttagcccc atgtgatgtg  aaaactaaaa ggcaccacca actagacatg tgttcaataa tcccatcta agaaacactg  ggaggcacag cagcctgtat ctctgaggaa gaggagcgag gacaaagtgt gccagatgg  gggctgaatc attcaactgc ctccatctgt gggcgagctg ctgctttaca gcccttcta  ctagactgag catccgaag gagacctaaa tcatacttg ggtgtgtga cccagatgca  cagagctctg cttgaacaag gtacacggcg cagggaatg ccagcaa</p>	Homo sapiens
497	160223 G Protein- Coupled Receptor G2A	NM_013345	<p>YGAESQNPTV KALLIVAYSF IIVSF LGNV LVCHVLFKNQ RMTSATSLFI VNLAVADIMI  TLNTPFTLV RFVNSTWIFG KGMCHVSREFA QYCSLHVSAL TLTAIVDRH QVIMHPLKPR  ISITKGVYI AVIWTMATFF SLPHAIQOKL FTKYSEDIV RSLCLPDEPE PADLEFWKYLD  LATFILLYL PLIISVAYA RVAKKLWLCN MIGDVTEQY FALRRKKKT IKMLMLVVVL  FALCWFFLNC YVLLSSKVI RTNNALYFAF HWFAMSSTCY NPFTYCWLINE NFRIELKALL  SMCQRPPKPKQ EDGQSPVPS FRVAWTEKND GQRAPIANNL LPTSQSQSGK TDLSSVEPIV  TMS</p> <p>gggaggggtg cgaaggctagc cagcagggcg gggccctggg tcattttaaa ctctcagagt A  gaactgttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc  cacactgaga ttggaacccg caaaatatgc caggagaggaa ggtgagcaag ggacacgaca  ctcacccgga taaacccaac aagcgcagcg agcgtgtggg gaaaccggan cctgacac  cgccggggga aggtgggcn cgccaccac cgtggaagaa agcgcggan gacccccag  agatgagacg gaactgccgt gagatccagc aatnccnact gtgggtctga cccaggatan  cggaagacag ggaactgaa acgctctc atgttcttga caccgtcatt ctccagcagt  cagctaaggc acagagggcag ccgagcgtct gtcagcagag toggtggctga gcagaacacg  ccacacgcca cagccacac gccacacgtg caggattgct caagatggaa gggcacagtg  gaatatatat atatatatat atttttggcg agacctgga ggacacactg aatacaatgg  aataccatcc cgcctttgaa aggaaggaa atctctggac acgctgcaac aggagggagc  ttgaggacac tgtgtgtgagt ggagcacgtg agacacggaa ggacacacgc tgaagacacg  cagagatgcc caccacgtg gggaggtgac aggggagccc agcgcacaga gacaaagtgg  aatggaggcc tgggggctgg gagcaaatgc gtagcagagt ctctctgggg cagagtctcc  gtttgggaag atgagaaggt tctgcccagc gatgtggcg atgtgtgac aagaatgtga  atgtgccccaa tgctactgaa aaacggttac aatgaaacg cccccagc gaccacct  gccccgtggg cctccctggg cctctccgc aagacctga acaactgtc ctctgaagag</p>	Homo sapiens

498	160223	G Protein- Coupled Receptor G2A	NP_037477.1	<p>agcaggatag tctgtgtcgt ggtgtacagc gcggtgtgca cgctgggggt gcgagccaac  tgcctgactg cgtggtggc gctgtgcag gtactgcagg gcaacgtgct ggcgtctac  ctgctctgcc tggcaactctg cgagctgctg tacacaggca cgctgccact ctgggtcact  tatatccgca accagcaccg ctggacccta ggcctgtggt cctgcaaggt gaccgacctac  atcttctct gcaacatcta cgtcagcatt cttctctgt gctgcatctc ctgagccgcg  ttcgtggccg tgggtgtacg gctggagagt cggggccgct actaccggt gttccagacg  ctcatctccg cctgcatctt catctcgtc ggcgtggtc ggcgcggag gaccgacctc  gaagacaagg agactcgtt tgacatgctg cagatggaca gacgatttg cgggtactac  tacgccaagt tcacggttg ctttgccatc cctctctcca tcctgcctt caccacccac  cggattttca ggagcatcaa gcagagcatg ggcttaagcg ctgcccagaa gcccaagggtg  aagcactcgg ccactcgggt ggtgtgcac ttctagtct gcttcgccc gtaccacctg  gttctctcgt tcaagccgc tgccttttcc tactacagag gagacaggaa cgccatgtgc  ggcttgagg aaagctgta cacagcctct gtggtgttct tgtgctgtc caggtggaac  ggcgtggctg acccattat ctactgtctg gccacggacc attcccgcca agaagtgtcc  agaatccata aggggtggaa agagtgttcc atgaagacag acgtcaccag gctcaccac  agcagggaca ccgaggagct gcagtcgccc gtggcccttg cagaccacta caccttctcc  aggcccgctg acccaccagg gtcaccatgc cctgcaaga ggcgtattga ggagtctcgc  tgagccact gtgtggcagg gggatggcag gttgggggtc ctggggccag caatgtggtt  cctgtgact gagccacca gccacagtgc ccattccccc ctggaagac aaactaccaa  ttctcgttc ctgaagccac tccctcgtg accactggcc ccangcttcc ccacatggaa  ggtggctgca tgcgaagggt aagagcgaca cctccagct tccgggagcc canagagcat  gtggcangca gtggggcctc ttcacatca ncctgcctg ctggctccct tggctgtggg  cangtacacc cctgctggca gaagtacctg gtgctgccc tgttcgcatc agtggcgatg  actttatttg cggagcattt ctgcaagcgt tgctggatg cgggtgtgca ttgtgggccc  tctgggctcc tgcctcaaaa tgtcagttag caccatgctg gaagtcacca tcactgtggc  agcggccagg aaggcatagg gcancctacc acctccaang gggcangcgc cctcatctgg  ggttgggt</p> <p>CLTAWLALLQ VLOGNVLAVY LLCLALCELL YTGTLPLMWI YIRNQHRWTL GLLACKVTAY  IFFCNIYVSI LFLCCISCDR FVAVVVALES RRRRRRTAI LISACIFILV GIVHYPVFQT  EDKETCFDML QMDSRIAGYY YARFTVGFAP LLSIAFTNH RIFRSIKQSM GLSAAQKAKV  KHSIAIAVVI FLVCFAPYHL VLLVKAAPS YYRGDRNAM GLEERLYTAS VVFLCLSTVN  GVADPIIYVL ATDHSRQEVSI RHKGWKEWS MKTDVTRLTH SRDTEELQSP VALADHYTFS  RPVHPGSPC PAKRLIEESC</p>	Homo sapiens
499	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NM_004767	<p>cggtgtacagg gggcccaaga gctgggctg ctgtctctg ctcatccagc catgctgtgg A  ctgtggcccc tggctgtctc tctgtctgtg atttggctg tggggctaag cagggtctct  gggggtgccc cctgcacct gggcaggcac agagccgaga ccagagagca gcagagccga  tccaagaggg gcacaggga tgaggaggcc aagggcgctg agcagtatgt gcctgaggag  tggcgaggagt accccggcc cattaccct gctggcctg agccaacca gcccttggtg  gccaccagcc ctaaccccg caaggatggg ggcacccccc agagtgggca ggaactgagg  ggcaatctga caggggcacc agggcagagg ctacagatcc agaaccctt gtatccgggtg</p>	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p>acggagagct cctacagtgc ctatgccatc atgcttctgg cgctgggtggt gtttgcgggtg  ggcattgtgg gcaacctgtc ggtcatgtgc atcgtgtggc acagctacta cctgaagagc  gcctggaact ccatccttgc cagcctggcc ctctgggatt tctgtgtccct etttttctgc  ctccctattg tcatcttcaa cgagatcacc aagcagagcc tactgggtga cgtttcttgt  cgtgccgtgc ccttcatgga ggtctctctc ctgggagtca cgactttcag cctctgtgcc  ctgggcattg accgcttcca cgtggccacc agcaccctgc ccaaggtgag gccatcagag  cggtgccaat ccatcctggc caagtggct gtcattcggg tgggtcccat gacgtggct  gtgacctgagc tctgtctgtg gcagctggca caggagctgc ccccaccat gggcacccctg  gactcatgca tcatgaaacc ctacagccagc ctgcccgagt cctgtattc actggtgatg  acctaccaga acgcccgcct gttgtgtgtac tttggtgct acttctgcct gccatcctc  ttcacagtca cctgccagct ggtgacatgg cgggtggcag gccctccagg gaggaagtea  gagtgcaggg ccagcaagca cgagcagtg gagagccagc tcaacagcac cgtgtgtggc  ctgacctgtg tctacgcctt ctgcaccctc ccagagaacy tctgcaacat cgtgtgtggc  tacctctoca cggagctgac ccgccagacc ctggacatcc tgggcctcat caaccagttc  tccaccttct tcaaggggcg catcacccca gtgctgtcc tttgcatctg caggccgctg  ggccaggcct tctgtgactg ctgctgtgc tctgtctgtg aggagtgagg cggggcttgc  gaggcctctg tgcacaatgg tctggacaac agctcaaga ccgaggtgtc ctcttccatc  tacttccaca agcccaggga gtcaccccca ctctgcccc tgggcacacc ttgctgaggg  cccagtaggg gtggggaggg agggagaggg gccaccccc gccggtgtct gctgttcttt  ccccataggt ctgtcttctg tgcctgtctt gctgtctagg gatggacttg gttcctcttg  tcaaggttgg ggaatccc</p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p>gagtcagccc ccggggggagg ccatgaaagc cagggggacc ccggtggccc ccgagtcctg A  ccaacagctg gcggccggcg ggcacagccg gctcattgtt ctgcactaca accactcggg  ccggttgccc ggccgcccgg ggccggaggga tggcgccctg ggggccctgc gggggctgtc  ggtggccgcc agctgcctgg tgggtgctga gaacttgctg tggctggcgg ccataccagag  ccacatgcgg tgcgacgct gggctacta ttgacctggg aacatcacgc tgagtgaact  gctcacgggc gcggcctacc tggccaaagt gctgtgtcg gggggccgca ccttcctct  ggcggccgcc cagtgttcc tacgggaggg cctgtcttc accgccctgg ccgctccac  cttcaggctg ctcttactg caggggagcg ctttgccacc atggtgcggc cggtgccga  gagcggggcc accaagacca gccgcgtcta cggctctctc ggcctctgct ggctgtggc  cgcgtgctg gggatgctgc ctttgctggg ctggaactgc ctgtgcgct ttgaccgctg  ctccagcctt ctgcccctct actccaagcg ctacatctc ttctgcctg tgatcttcg</p>	Homo sapiens

cggcgtcttg gccaccatca tgggcctcta tggggccatc ttccggcctgg tgcaggccag  
 cgggcagaag gccccacgcc cagcggccc cgcgaaggcc cgccgcctgc tgaagacggt  
 gctgatgc ctgtggcct tctgtgtgtg ctggggccca ctctcgggc tctgtctggc  
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 ccgcctcttg tgtgattctg gggaaagtccc ggccctcttc tgggctctcag tagggctccc  
 aggtgcgaag ggtgggactg tgggatgcat gcctggcaca cattgaagtt ccatcatggt  
 aaaaaa

Homo  
sapiens

502 160225 Sphingolipid NP\_003766.1 MNATGTPVAP ESCQOLAAGG HSRLLVLHYN HSGRLAGRG PEDGGIGALR GLSVAASCLV P  
 Receptor  
 Edg6  
 VLENLLVLA ITSHMRSRW VYCLVNITL SDLLTGAYL ANVLISGART FRLLAPAQWFL  
 REGLLFTALA AFSLSLLFTA GEFATMVRP VAESGATKTS RVYFGLGLCW LLAALLGMLP  
 LLGWNCICAF DRCSLLPLY SKRYILFCLV IFAGVLATIM GLYGAIFRLV QASGQKAPRP  
 AARRKARLL KTVLMILLAF LVCWGLPLGL LLADVFNSNL WAQEYLGRMD WILALAVLNS  
 AVNPIIYSFR SREVCRAVLS FLCGCLRLG MRGPGDCLAR AVEAHSGAST TDSSLRPRDS  
 FRGSRISFR MREPLSISS VRSI

Homo  
sapiens

503 160228 T-Cell NM\_003608  
 Death-  
 Associated  
 Gene 8  
 (GPR65)  
 atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tccatttgtt A  
 tacatctttg tgattatagt cagcattcca gccaatattg gatctctgtg tgtgtctttc  
 ctgcaaccca agaaggaaag tgaactagga atttacctct tcagtttgtc actatcagat  
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 agcacagcat tctcaccctg cattgccgtt gatcgtgatt tggctgttgt ctaccctttg  
 aagttttttt tctaaaggac aagaagaatt gcactcatgg tcagcctgtc catctggata  
 ttggaaaacca tcttcaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatatgtc  
 gatgcgaaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa  
 atcaacctca actgtgtcag gacgtgtaca ggctatgcaa taccttttgt caccatcctg  
 atctgtaacc ggaagtcta ccaagctgtg cggaacaata aagcaacgga aaacaaggaa  
 aagaagagaa tcataaaact actgtcagc atcacagtta ctttgtctt atgtcttact  
 cccctttcatg tgatgttgtt gattcgtgc attttagagc atgtgtgtaa cttcgaagac  
 cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacggttgc attaacaagt  
 ttaaatgttg ttgctgatcc aattctgtac tgttttgtta ccgaacacagg aagatatgat  
 atgtggaata tattaataat ctgcactggg aggtgtaata catcacaag acaagaagaa  
 cgcatacttt ctgtgtctac aaaagatact atggaattag aggtccttga gtag

504	160228	T-Cell Death- Associated Gene 8 (GPR65)	NP_003599.1	MNSTCIEEQH DLDDHLYLPPIV YIFVIIVSIP ANIGSLCVSF LQPKKESELG IYLFSLSLSD P LLYALTLPW IDYTWNKDNW TFSALCKGS AFLMYMKFS STAFITCIAV DRYLAWVYPL KFFFLRTRRI ALMVSLSIWI LETIFNAVML WEDETVEVC DAEKSNFTLC YDKYPLEKWQ ININLFRCT GYAIPLVITIL ICNRKVYQAV RHNKATENKE KRRIIKLLVS ITVTFVLCFT PFHVMILLIR ILEHAVNFED HNSGKRITYT MYRITVALTS LNCVADPILY CFVTETGRYD MWNILKFCRG RCNTSQQRK RILSVSTKDT MELEVLE	Homo sapiens
505	160300	Encephalopsi n	NM_014322	cgagcccgcg cgaaagtga ggcgctccgc cgcgcaggcg cgccggggcc gggccatgta A ctcggggaaac cgcagcgcg gccacggcta ctgggacgcg ggcggggccg cgggcgctga ggggccggcg cgcgggggga cactgagccc cgcgcccctc ttacgccccg gcacctacga gcgctggcg ctgctgctgg gctccattgg gctgctggcg gtcggcaaca acctgctggt gctgctcctc tactacaagt tccagcggtc cgcacatccc actcacctcc tccggtgtaa catcagcctc agcgacctgc tgggtgctcc ctccggggct acctttacct tegtgtcctg cctgaggaac ggctgggtgt gggacacccgt gggctgctgg tgggacgggt ttacgcgcg cctcttcggg attgtttcca ttgccacccct aacctgctg gcctatgaac gttacattcg cgtgggtccat gccagagtga tcaatttttc ctgggcccgg agggccatta cctacatctg gctctactca ctggcgtggg caggagcacc tctcctggga tggaaacaggt acatcctgga cgtaacggga ctaggctgca ctgtggactg gaaatccaag gatgccaacg attcctcctt tgtgcttttc ttattcttg gctgctggtt ggtgccccct ggtgtcatag ccatttgcta tggccatatt ctatatcca ttogaatgct tegtgtgtg gaagatcttc agacaattca agtgaataag attttaaaat atgaagaaga actggccaaa atgtgctttt taatgatatt caccttccctg gctgtgtgga tgccttatat cgtgatctgc ttctggtggg ttaatgggtca tggtcacctg gtcactccaa caatatctat tgtttcgtac ctcttggcta aatcgaacac tgtatacaat ccagtgaatt atgtcttcat gatcagaaag ttccgaagat ccctttgca gcttctgtgc ctccgactgc tgggtgcca gaggcctgct aaagacatc cagcagctgg aagtgaatg cagatcagac caattgtgat gtcacagaaa gatggggaca ggccaaagaa aaaagtgact ttcaactctt ctccatcat ttttatcat accagtgatg aatcactgtc agttgacgac agcgacaaaa ccattggggt ccaaagtttg atgttaatcc aagttcgtcc tttgtaggaa tgaaggatgg caacgaaagg tggggccctta aattggatgc cacttttga ctttcatcat cctcctgaag aagaagtgtc tggaaatccc gtctatgta atataacag aaccttgtgg tccagcagga atccgaatt gcccatatgc tcttggccct caggaagagg ttgaacaaaa acaaatctt ttaattcaac ggggtgctta cataatgaaa aaaccacttg tgcacacgat gggcatctaa catcatcatc ttctaagtgg ttggagatgt tcaattcaaa tatatttttt aaattactct attttccaa acacgtaatg catttttctc gaaaatacct tactgtaaaa ataatgtcg cgtacacatg tgtgaagtga ctagaacata ctgaattttt tttgtactgt tggactctat tcaagtctat gtcctatc tgatcaagtt atcaaggaga taattctaga atgaaaaaa aaatcctctt gttggaaaaa aaagacgttt tatatgtgca gtatgacaaa gaggagtctc agagacaact ttgaatcctt gtcagcctgg agaccagcac cagaggaaac tacaaaggcaa actcccatat atttgcctcc cccaaattgc tgcccctaca gactcaaaag tctttttctt tgttttgttg ttctctaaa aatttactgt tctttgtcga tgcataataa gccaggaggt tctaagacgc cagctctttg agatttgctc attccctgt atttcccaca tatatatatc atataccgc taataaattt atgtttgttt taaaaaaaa	Homo sapiens

[illegible]

510	160314	G Protein- Coupled Receptor GPR103	ENSMPT2217 53	<p>attcccgctca ccattgtcca gaacatttcc gacaactggc tggggggtgc tttcatttgc</p> <p>aagatgggtgc catttgtcca gtctaccgct gtgtgacag aaatcctcac tatgacctgc</p> <p>attgctgtgg aaaggacca gggacttgtg catcctttta aaatgaagtg gaataacacc</p> <p>aaccgaagggt ctttcaaat gctaggtgtg gtctggctgg tggcagtcac cgtaggatca</p> <p>cccatgtggc acgtgaaca acttgagatc aaatatgact tctatatga aaaggaacac</p> <p>atctgctgct tagaagagtg gaccagccct gtgcaccaga agatctacac cacttctac</p> <p>ctgtcactct ctctctctg cctcttatgg aagaagaaac gagctgtcat tatgatggtg</p> <p>acagtgggtg ctctcttgc tgtgtgctgg gcaccattcc atgtgtcca tatgatgatt</p> <p>gaatacagta atttgaaaa ggaatatgat gatgtcaca tcaagatgat tttgtctatc</p> <p>gtgcaaaatta ttggattttc caactccatc tghtaaccac ttgtctatgc atttatgaat</p> <p>gaaaacttca aaaaaatgt ttgtctgca gtttgttatt gcatagtaaa taaaaccttc</p> <p>tctccagcac aaaggcatgg aaattcagga attacaatga tgcggaagaa agcaaaagttt</p> <p>tccctcagag agaattccagt ggaggaaacc aaaggagaag cattcagtga tggcaacatt</p> <p>gaagtcaaat tgtgtgaaca gacagaggag aagaaaaagc tcaaacgaca tcttgctctc</p> <p>tttaggtctg aactggctga gaattctctc ttagacagtg ggcattaa</p>	Homo sapiens
				<p>MKIKYDFLYE KEHICGLEEW TSPVHQKIYT TFIILVILFLL PLMVMILLYS KIGYELWIKK P</p> <p>RVGDGSLVRT IHGKENS KIA RKKRAVIMM VTWALFAVC WAPFHVVHMM IEYSNFEKEY</p> <p>DDVTIRKIFA IVQIIGFSNS ICNPIVAFM NENFKKNVLS AVCYCIVNKT FSPAQRHGNS</p> <p>GITMMRKAK FSLRNPVEE TKGEAFSDGN IEVKLCEQTE EKKKLKRHLA LFRSELAENS</p> <p>PLDSG</p>	
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512	160317	Neuropeptide NP_004876.1 FF 2 Receptor	catggctgcc cctgtggact ctaatgatgc tctcagacta cgctgacctt tctccaaatg aactgcagat catcaacatc tacatctacc cttttgcaca ctggctggca ttcggcaaca gcagtgtcaa tcccatcatt tatggtttct tcaacagaa tttccgcctt ggtttccaa aagctttcca gctccagctc tgccaaaaa gagcaagcc tatggaagct tataccctaa aagctaaaag ccaatgtgctc ataacacat ctaatcagct tgtccaggaa tctacattc aaaaccctca tggggaacc ttgctttata ggaaaaagtc tgaaaaaccc caacaggaa tagtgatgga agaattaaaa gaaactacta acagcagtgga gatttaaaaa gagctagtgt gataatccta actctactac gcattatata tttaaatcca ttgctttttg tggctttgca cttcaaatct ttcaagaat gtcttaata aacattttac tgaaagccct ccttgga aaaattaaaa ataaacaaaa atggtcataa gatcataaac aatcttatgt tgtataaaa tagctagagt gacttagaca tgtttgcatg aataaatata tttctagaga acagttaaaa aaaaaaaaa aaaaa	Homo sapiens
513	160324	G Protein-Coupled Receptor GPR86/GPR94/P2Y13	LGSLRQTAKS SWSRSRDRTS SAPDKEAGRE RRALSVOQRG GPAWSGSLEW SRQSAGDRRR P VNDTKHLLYS DINITVYNY LHQPOVAAIF IISYFLIFFL CMGNTVVCF IVMRNKHMHT VTNLFILNLA ISDLLVGIFC MPITLLDNII AGWPFNTMC KISGLVQGIS VAASVFTLVA IAVDRFQCVV YPFKPKLTIK TAFVIMIIW VLAITIMSPS AVMLHVQEEK YYRVRINSON KTSPIVWCRE DWPNOEMRKI YTTVLFPANII YGRIGISLFR AAVPHTGRKN QEQWHVSRK KQKIIKMLLI VALLFILSWL PLWTLMLSD YADLSNELQ IINIYYPFA HWLAFGNSSV NPIIYGFENE NFRGFQEF QLQLCQKRAK PMEAYTLKAK SHVLINTSNQ LVQESTFQNP HGETLLYRKS AEKPOQELVM FELKETNSS EI aacagtattt tcttttcaa cacatctatt gaaagtgttg gataaatgca ggatgtaaat A atgctataaa cataaagtct gtttttaaaa aatagcattt gaaaatcatg aagggtttt tggtttcttt tggttgata tatgtttatt ggtaacaggt gacactggaa gcaatgaaca ccacagtgat gcaaggcttc aacagatctg agcgtgccc gagagacact cggatagtag agctggtatt cccagccctc tacacagtgg ttttcttgac cggcatcctg ctgaatactt tggtctgtg ggtgtttgtt cacatccca gctcctccac ctccatcatc tacctcaaaa acactttggt ggcgacttg ataatgacac tcatgcttcc ttcaaaaac ctctctgact cacacctggc accctggcag ctcagagctt ttgtgtgtcg ttttcttcg gtgatatatt atgagacctat gtatgtgggc atcgtgctgt tagggtcat agcctttgac agattcctca agatcatcag acccttgaga aatatttttc taaaaaac tgtttttgca aaaacggtct caatctcoat ctggttcttt ttgttcttca tctccctgcc aaatatgac ttgagcaaca aggaagcaac accatctct gtgaaaaagt gtgcttctt aaaggggcct ctggggctga aatggcatca aatgtaaat aacatatgcc agttatttt ctggactgtt tttatcctaa tgcttggtt ttatgtggtt attgcaaaaa agtatatga tcttataga aagtccaaaa gtaaggacag aaaaaacaac aaaaagctgg aaggcaagt attgtgtgc gtggtgtct tctttgtgtg tttgtctcca ttcatatttg ccagagtcc atatactac agtcaaacca acaataagac tgactgtaga ctgcaaaatc aactgtttat tgctaaagaa acaactctt ttttggcagc aactaacatt tgtatggatc ccttaataa cataattcta tgtaaaaaat tcacagaaaa gctaccatgt atgcaaggga gaaagccac agcatcaagc caagaaaaatc atagcagtca gacagacaac ataaccttag gctgacaact gtacataggg ttaacttcta	Homo sapiens



514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p>           tttattgatg agacttcogt agataaatgt gaaatacaat ttaaccaaga aaaaaagatt            ggaacaaatg ctctcttaca ttttattatc ctggtgtaca gaaaagatta tataaaattt            aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaat gcaacaggat            acaaatggcc actagaggtc attatttctt tctttctttt tttttttttt aatttcaaga            gcatttcact ttaacatttt ggaaaaagact aaggagaac gtatatccct acaaacctcc            cctccaaaaca cctctcaca ttcttttcca caattcacat aacactactg cttttgtgcc            ccttaaatgt agatagtgc tgaagaataa aaaaaagcc caactcttga agtccattgc            tgaanaactgc agccaggggt tgaaggggat gcagacttga aggtcttgag gaactgaagt            gggtcagcaa gaccttgaa atcctgggta aaggatttcc tcttacaat tacaacagc            ctcttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg            ctacacctt aagtgtgtac aattcaagt tgagaaatgct gtgttaacta tcttttgaa            ttctccttct gtccagcaaa tactctaagt atggttaaac atggcaccta ctacagcaatg            ccttcctgga ccacaaaccc tatccccctg cccacccctc ctcatataaa acaataactt            ctactgtttg ggtgtgtgat aggtttctca atgcagatct cctttttcta gttagctata            ttcttgactg catccgctaa aaatgttaaa gcttcttgag agacagacat gccagatttt            ctgtgtatct cccataatc gacctacagt ccatgggtcta cagatgtttt aaatagaatt            gctattctcg atacatacaa agacgtaatt gctgacccac aatcagtaac atccatattg            gagattttt caaaggatgg tgacctgtct tactttatt taccttggtg tttttcttg            catccttctg tgattcaaaa agtaaaaatg tggctttctg aaatgatgga taagagtcta            catcttctag aaaaaataca taaaggagta gttaaagctg ggcctcaaa ggcctagaac            aacacgacca tcgtaggggt aagccacagt ttcttccat ggcctcaaa ggcctagaac            ttgcctacct tctggcctt acctcctagc tacttataca tctcttgaac tttatactct            tgtataaatt tctaactttc agaaaatgcc atactctgt ttggcaccac acatgtatat            ttccccctgg tacacttggga agactcttat ccactgtgga aacctatgt tgtcatcact            tggcccatga aatattacct ggccaatc cccacatcac ctcaaaaccca atcacccct            cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgt aattacttcc            tgacctttgt atctactctt ttagtaactg atgtatat atgtatat ctgaaaggag agattgttcc            attgtgcaat caataaatgt ttgataaaat aaagccc         </p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p>           LKNTLVADLI MTLMLPFKIL SDSHLAPWQL RAFVCRFSSV IFYETMVG I VLLGLIAFDR            FLKIIIRPLRN IFLKKPVFAK TVSIFIWFFL FFISLPNMIL SNKEATPSSV KKCASLKGPL            GLKWHQMVNN ICQIFWTVF ILMLVFYVVI AKKYDSYRK SKSKDRKNK KLEGKVFVVV            AVFFVCFAFF HFARVPYTHS QTNNKTDCLR QNQLFAKET TLFLAATNIC MDPLIYIFLC            KKFTKXLPKM QGRKTASSQ ENHSSQTDNI TLG         </p>	Homo sapiens

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516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> tggggctggg gctgcatcc ctggagactc actgcaagtt cctgccagg aggtgaggg  caccctacc tcagtgcaca atgtgtggc ccaccaggc ccagagcctg gttggccatt  ctcatgcca ccagcttctg gcttgggat gtctcttgag caaccagaat agcaccacca  actctgctc ccaaaacca tcaatagcac ggctcagcct cctgctatcc cctgactgct  ggggaacctc gccttccctc ctctcactg caggctgac ttcttttca cttctgtca  atgtcaccag ggataaggtg ggacaatgg gggtgggggt ggacagtgtg tgcctggggg  ttcgggtgct gcagacctgg aactcccttc tgccaggatg ttggcagccg gttgtaagcc  ttgcacgga cagaccacac ccacgcaac ctcatccct cagcaactaac cacatccact  ctcaaccccg tccctctgc actgaccaca ccccccgt cgccccgc ccccgcaact  gaacactcc gccctcaacc ccgaccctc cgcactacc tccccctgc cgtcgaccc  cgccctacc aactgacca cctcaaccc attgcccaca tccccacca cagtgaccac  accctcactg gctcggcct gccccagta tactgacct tccccagcca cttcccttc  gacttacea ctccccagc cagccccct cccgctgacc gctcctcag cccgcctcc  ccgtacagg cagagcgccc gccacctct atgtcgctt ctctgactt taegtggcc  ctctctctg caagccacca gggagacct cctggcgct cgagggtggg agtcgggggtg  tggcaggccg cgttgggggg cgcagtggt tccgcgact caccgggcc cgggcaggg  gcgcgtcca ctctgttga cgcgggtccg gcgcacagt cccggcgag tgggctgtgc  gtgctgact ttagaagcg agtggcctc agggctacgg gacgaggggtg gcgggtgacc  aagtgcagg ccgacgggtc agggaccgg cgggcccgg ggtgcggcg cgcgggccta  ccgggttct agtagtgta acggagact ggcagcgcc acgtctctg caccacgcac  tcccgagag cagggaacc cagcacgtc aggcacccg tggggtctg tgggcagcg  gcgggcgag gctgacccg ggcaggagg cccggggcg tgagctcagg cccagaaactg  gctgattca gggataccca ggacgctga aacacagaag aaactgtatc ccatcttct  ttttctttt actttcttt tttttttt ttctgagac agagtctgc gctgttgccc  aggctggagt gcagtggcgt gatctggct cactgcaagc tcggcctcct ggggtcaaat  gattctctg cctcagctc ccaagtagct gggataacag gcgccacca ccgacacctg  ctaattttt gtattttga tcaagacgga gtttccact gttggccagg ctggtctcca  actcctgccc tcaagtgtc cgcctcggt ccatttttt ttcttgggt ccttccatcc  cactgggaaa acgtctcagg tggcctctga aacaccactc cttttgtgt gttgacagc  atggctgagc atgtgtgggt ggagtcagc acattcaca tactgtcaa tcatcacctc  tgtctagta caggacgggt tcttctccc ccaaagaaac cccatcgcca tcagcactca  ctcccaactc cccagcccc tggaaccac aaatctttc aactctacgg attgctgtg  tctgggcatt tcatgtcaat ggaatcatgt actctgtgaa aaaaaaaaa aaaaaaaa  aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaa </p>	Homo sapiens
				<p> MWGRLLWFL VLGFSLSGGT QTFSVYDESG STGGDDSTP SILPARGY P QVVCANDSDT P  LELPDSSRAL LLGWVTRLV PLYGLVLV GLPANGLAIW VLATQAPRLP STMLLMNLAT  ADLLALALP PRIAYHRLGQ RWPFGAAGR LATAALYGHM YGSVLLAAV SLDRYLALVH  PLRARALRGR RLALGLCMAA WLMAAALALP LTLQRTFRL ARSDRVLCND ALPLDAQASH  WQPAFTCLAL LGCFLPLLAM LLCYGATLHT LAASGRRYGH ALRLTAVVLA SAVAFFVPSN  LLLLLHSDP SPSAWGNLYG AYVPSLALST LNSCVDPFY YVSAEFRDK VRAGLFQFSP  GDTVASKASA EGGSRGMGTH SLLQ </p>	

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 Pass G-Type  
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Homo  
sapiens

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Homo sapiens

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Homo  
sapiens

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aaggcgccta ttctttttt

SEQ ID NO:	LSID	Gene	Source ID	LPID	Peptide	SpeciesName
692	127	5-HT1A Receptor	P08908	595	CAPASFERKNERNAEAKRKM	Homo sapiens
693	127	5-HT1A Receptor	P08908	608	GRIFRAARFIRKTVKKVE	Homo sapiens
694	127	5-HT1A Receptor	P08908	610	RTPEDRSDPDACTISK	Homo sapiens
695	127	5-HT1A Receptor	P08908	612	RHGASPAQPKKSVNGE	Homo sapiens
696	128	5-HT1B Receptor	P28222	585	KQTPNRTGKRLTRAQLITD	Homo sapiens
697	128	5-HT1B Receptor	P28222	586	SPGSTSSVTSINSRVPD	Homo sapiens
698	128	5-HT1B Receptor	P28222	598	KVRVSDALLEKKLMA	Homo sapiens
699	128	5-HT1B Receptor	P28222	599	ANLSSAPSQNCSAKD	Homo sapiens
700	129	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	129	5-HT1D Receptor	P28221	588	QEASNRSLNATETSEA	Homo sapiens
702	129	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	129	5-HT1D Receptor	P28221	590	KAQEEMSDCLVNTSQIS	Homo sapiens
704	130	5-HT1E Receptor	P28566	815	RHLSNIRSTDSQNSFASC	Homo sapiens
705	130	5-HT1E Receptor	P28566	817	CTTEASMAIRPKTITEKM	Homo sapiens
706	130	5-HT1E Receptor	P28566	818	DNDLDHPGERQQISST	Homo sapiens
707	130	5-HT1E Receptor	P28566	2738	CVSDFSTSDPTTEFEK	Homo sapiens
708	130	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	131	5-HT1F Receptor	P30939	604	ESGEKSTKSVSTSYVL	Homo sapiens
710	131	5-HT1F Receptor	P30939	606	DKCKISEEMSNFLAWLG	Homo sapiens
711	131	5-HT1F Receptor	P30939	864	IAKEEVNGQVLESSE	Homo sapiens
712	131	5-HT1F Receptor	P30939	869	STVRSLSREFKHEKSWR	Homo sapiens
713	132	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSNRINLSC	Homo sapiens
714	132	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVFKEGSC	Homo sapiens
715	132	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRRTMQSISNEQKAC	Homo sapiens
716	132	5-HT2A Receptor	CAA01675.1	1109	CSMVALGKGHSEEAASKDNSD	Homo sapiens
717	132	5-HT2A Receptor	CAA01675.1	1110	NTPALAYKSSQLQMGQ	Homo sapiens
718	133	5-HT2B Receptor	P41595	1111	KGIETDVDPNPNITC	Homo sapiens
719	133	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	133	5-HT2B Receptor	P41595	1113	RRITSTIGKSKVQTSNE	Homo sapiens
721	133	5-HT2B Receptor	P41595	1114	CNYRATKSVKTLRKRSSK	Homo sapiens
722	133	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVVEEQG	Homo sapiens
723	134	5-HT2C Receptor	P28335	1115	CKRNTAEENSANPNQDQNA	Homo sapiens
724	134	5-HT2C Receptor	P28335	1116	GHTEEPPLSLDLFLKC	Homo sapiens
725	134	5-HT2C Receptor	P28335	1117	CNYKVEKKPPVRQIPRV	Homo sapiens
726	134	5-HT2C Receptor	P28335	1118	IGLRDEEKVFVNNITC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHTNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVPAIVTDIFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKPDGVQNWPAIS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIIDLEIKRFNG	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRQSQADQSHTHMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERVRRPSILGQTP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VTAKEHAHQIMLQRAGASSSRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRRAFLILCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VTAKEHAHQIMLQRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIMLQRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VTAKEHAHQIMLQR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRERQASLASPSLRTS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMRDFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAANFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASAPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAAKHKFPGFPRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLIRAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAA17544.1	8	CHKPSILTYIAIFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAA17544.1	9	NGSMGEPVKEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAA17544.1	10	NKKVSASSGDPQKYWGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAA17544.1	11	NDHFRGQAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAA17544.1	303	MPPSISAFQAAYIGIEVU	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNGLPDVELLSHELKGV	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPKAAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQTRKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNNCTEPWDGTINES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRQLQRTELMDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDFRYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSNGGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGKKNPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MILETQDALVVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIIRNKLNLNLSNKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTFSLC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKFKETYLLKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRRIWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGVYLPRGSFETTADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTVVVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELRDAFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTTRSLGAVKRRGKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEVPDPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMSNKELTRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSGSRKDSLDDSGSC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPESPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKTHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSARITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPGLGPERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEPAPAGPRDTDALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RGPGATGIGTPAAGPGE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	YKGDQGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPPPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASGRGQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTALIT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGLRFRKWWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRIMKEYSDEGHNTAC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKFE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIIDVITQASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRTS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAA51667.1	1357	RVFREAGKQVKKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAA51667.1	1358	CERFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAA51667.1	1359	ANGRAGKRRPSRLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAA51667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAA51667.1	1361	CLARPGPPSPGAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAA51667.1	1362	CNGGAAADSDSSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVMVFVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SPSLAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMTDESDT	Homo sapiens
825	692	Bombesin Receptor Subtype-3	AAA35604.1	20	SITNDESSSSVVSNDTNK	Homo sapiens
826	692	Bombesin Receptor Subtype-3	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNIMTFESCTSPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLINIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAQQLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	GRQPHSPNQTLISITNDTE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAEDR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SQGHNNLSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CWVGWHLRLQAQRPR	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFSPWRRSSSESENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVFQDFLTHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFVETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYIPFLPSEKLETS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVIDTQDETQVNSVY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESIYSNWLYESIPKC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSYTQSTMDHDLHD	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLEVLQDCFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTDYIGDNTVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHRRSSMSVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKFDLGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELQING	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHQLKRCQNHINKTKAIR	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENESDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNGRGLQRQPSSRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRMTDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHGKQRKALK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KILSKGKRGHSHSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRDL	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPLDNSD	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQIGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPADSLSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDKTSNLTLRVPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAVAIVRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRRLKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELEESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVTISDGGPGYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENFENIQCGENFMDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVKVTRPDQARMDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAGPLDNSMGDSD	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTIFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSFKENEENIQC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDYMILSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVRLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEEAPRSSVTETEADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMMPGRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEVPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMMPGPR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASLNLSHKKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNNTKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKGFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTSS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHWSWEGHIRPTRKPNTK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLLNGQVREEYKRWITGKTP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLLNGQVREEYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQG	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSUEVFNLHERYYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLYIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSITSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVGEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing factor Receptor 2	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens



915	1103	factor Receptor 2	Q13324	505	DPEGPYSYCNITLDQIGTCW	Homo sapiens
916	1103	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTMTLNLG	Homo sapiens
917	1240	Dopamine Receptor D1	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
918	1240	Dopamine Receptor D1	CAA41734.1	42	KAKPTSPSDGNATSLAETID	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESSEFKMSFKRE	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEEAAGIARPLEK	Homo sapiens
921	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1408	CAPDTSLRASIKKETK	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
925	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFAHLRAPLKGNC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1404	CTVIMKNSGSPVNRIRRV	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1405	KPEKNHGAKDHPKIAK	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1406	GKTRISLKTMSRRKLSQQKE	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1398	KQRRRKRLTRQNSQC	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERGGGE	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1401	KREKTRNSLSPTIAP	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRVNRQGGSR	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRRPRRP	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1397	PPQTPPQTRRRRRRAKITGRE	Homo sapiens
938	1267	Op1oid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Op1oid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIRRDPLVVAALHLC	Homo sapiens
940	1267	Op1oid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Op1oid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERTAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVMNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANILEAAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERITCMEYPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRITAKGNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMTETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKVMRMILKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RSLAPAEVPKGDRTAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PRTISPPCCQGPPIKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EEKQSLEEKQSLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSTNLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNITDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGLKFFREEAFERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLVDIFLR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFNSSTAFLPLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGEPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAARATLRRSN	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALWSSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKVATILTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTINDTAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SYESAGYTVLRILPLWL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFLTTIPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKVAITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTINDTAANSAS	Homo sapiens

971	1681	Like Receptor					
		Follicle Stimulating Hormone Receptor	AAA52477.1	58	QESKVTEIPSDLPRNAIELR		Homo sapiens
972	1681	Follicle Stimulating Hormone Receptor	AAA52477.1	59	DVLEVIEADVFSNLPK		Homo sapiens
973	1681	Follicle Stimulating Hormone Receptor	AAA52477.1	60	RNGHCSSAPRVTSGSTY		Homo sapiens
974	1681	Follicle Stimulating Hormone Receptor	AAA52477.1	61	RGQRSSLAEDNESSYRQFD		Homo sapiens
975	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2231	CHHRICHCSNRVFLCQE		Homo sapiens
976	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2232	LRVIQKGAFSGGFDLEK		Homo sapiens
977	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2233	LYVMSILLVNLVAFVVIC		Homo sapiens
978	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2234	CNKSILRQEVDYMTQARGQR		Homo sapiens
979	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2236	SDNNNLEELPNDV FHGA		Homo sapiens
980	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2238	KLVALMEASLTYP SHC		Homo sapiens
981	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2241	SFESVILWLKNGIQEI HNC		Homo sapiens
982	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2248	IHSLQKVLDDIQDNI NIHT		Homo sapiens
983	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2250	KANNLLYITPEAFQ NL P		Homo sapiens
984	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	2251	CYEMQAQIYRTIETSTVH		Homo sapiens
985	1726	G Protein-Coupled Receptor RDC1	AAA62370.1	1437	TNTPSSRRKKMVR RVWC		Homo sapiens
986	1726	G Protein-Coupled Receptor RDC1	AAA62370.1	1439	ARAIASDDQEKHSS RK		Homo sapiens
987	1726	G Protein-Coupled Receptor RDC1	AAA62370.1	1440	KYSAKTGLTKLIDAS RVSET		Homo sapiens
988	1726	G Protein-Coupled Receptor RDC1	AAA62370.1	1893	PDTYWLKTVTSASNNETYC		Homo sapiens
989	1762	Galanin Receptor GalR1	AAA50767.1	192	GNSLVITVLARSKPGKPR		Homo sapiens
990	1762	Galanin Receptor GalR1	AAA50767.1	193	PRASNQITFCWEQW PDPRHKK		Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVITVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRULER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRRSLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISHSADLPVNDDWSHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELEAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGGLPGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGDCY	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSQKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPWRDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQIMDGEEIVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEKGKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALKSNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNQSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPEGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKKLK	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDITNEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRRGDAVVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLTLDSSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing	Q02643	834	CPDFFSHFSSES GAVKRD	Homo sapiens
1027	1954	Hormone Receptor	Q02643	835	VRKLEPAQGS LHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing	Q02643	836	RTEISRKWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQHRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVWFSQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQYVSGLHMNRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYYRIFKVARDDQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVVRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLRNASQLSRITQSRE	Homo sapiens
1040	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDDD	Homo sapiens
1042	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMNK	Homo sapiens
1043	2783	Opioid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSES	Homo sapiens
1045	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1433	KMHNGAFRGATGPKILD	Homo sapiens
1046	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1434	CESTVRKVSNKILYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Choriogonadotro pin Receptor	Q14751	1436	CKRRAELVRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLTIRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRSHSGPRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVAWVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLIYAFRSLRLNTRFE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNGSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor	P41968	563	IVHSDYLTFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R)	Melanocortin 4 Receptor	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1033	KRIAVLPGTGAIRQGA	Homo sapiens
1063	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1035	NSTDIDAQSFVNIDN	Homo sapiens
1064	3058	(MC4R)	Melanocortin 4 Receptor	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1025	MNSSFHJHFLDLNLNAT	Homo sapiens
1068	3059	(MC5R)	Melanocortin 5 Receptor	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1036	QGSQRRLLGSLNSTPT	Homo sapiens
1070	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	(MC1R)	Melanocortin 1 Receptor	AAD41352.1	1040	CQHAQGIARLHKRQRP	Homo sapiens
1073	3079	Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens	
1074	3079	Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens	
1075	3079	Melatonin Receptor type 1a	AAB17720.1	216	QVRQVRVKPDRPKLKP	Homo sapiens	
1076	3079	Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens	
1077	3080	Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens	
1078	3080	Melatonin Receptor type 1b	P49286	931	LVAIFYDGWALGEEHC	Homo sapiens	
1079	3080	Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens	
1080	3080	Melatonin Receptor type 1b	P49286	933	CIQDASKGSHAEGLQSPA	Homo sapiens	
1081	3080	Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens	
1082	3081	Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPDNQLAE	Homo sapiens	
1083	3081	Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens	
1084	3081	Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens	
1085	3081	Melatonin-Related Receptor	Q13585	754	HPKPAAADNPELSASHC	Homo sapiens	

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPEASSPAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMKNKSGVVRVVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNITFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTIKTLNVVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLGEVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPERPADTHNEVRFDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTKVDEAEVMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNYEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMNSIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPPITKPERVVG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens



1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMIHWPGSGGQLPRSC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVVSKSNIIRSV	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQTAVIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPISLISHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSGTQSDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAGSVRIPQERKDRITIDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLLDTPNRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELLYIRA	Homo sapiens

1126	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	924	KVEDMQWAHREHTHPASVC	Homo sapiens
1127	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	925	CESLENTSTIKTIYSYS	Homo sapiens
1128	3100	Receptor 8	Metabotropic Glutamate Receptor 8	O00222	1894	KFYWILTMQRTHSQEYAH	Homo sapiens
1129	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	231	DGNLSDPCGPNRTNLGGRDS	Homo sapiens
1130	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	233	IKALVTIPETTFQTVS	Homo sapiens
1132	3212	Receptor 8	Opioid mu-type Receptor	AAA20580.1	234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1325	SERSQPGAGSGPETPPGRC	Homo sapiens
1134	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1326	CRAPRLLQAYSWKKEE	Homo sapiens
1135	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1327	SSEGEPPGSEVVIKMP	Homo sapiens
1136	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1328	KQPPRSSPNTVKRPTKGRD	Homo sapiens
1137	3223	Receptor M1	Muscarinic acetylcholine Receptor M1	AAA35686.1	1329	CRWDKRRWRKIPKRPGS	Homo sapiens
1138	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1332	ENTVSTSLGHSKDENSEKQTC	Homo sapiens
1141	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1333	DEKQNVIVARKIVKMTK	Homo sapiens
1142	3224	Receptor M2	Muscarinic acetylcholine Receptor M2	AAA51570.1	1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	218	SRSRVHKHRPEGPKEKKA	Homo sapiens
1144	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	219	KKPRPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	220	DKDTSNESSGSATQNTKER	Homo sapiens
1146	3226	Receptor M4	Muscarinic acetylcholine Receptor M4	AAA51571.1	221	RPAANVARKEFASARNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRALEFSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAETEETIV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQIM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLITNQFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATPRDPSFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTAASLAAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSPQP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTTELIVRC	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISSLDNSSFTAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSQYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPELIDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKRISF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSUEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEADENQTVEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHKALEFLADKVC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIYRRLQRQGRVFKG	Homo sapiens

1171	3405	Type 4 Neuropeptide Y Receptor	P50391	1071	CQQSAPLEESEHLPLST	Homo sapiens
1172	3405	Type 4 Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFVTS	Homo sapiens
1173	3406	Type 4 Neuropeptide Y Receptor	Q15761	1072	MKKRNQKTTVNFLGN	Homo sapiens
1174	3406	Type 5 Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5 Neuropeptide Y Receptor	Q15761	1074	NLTLHPSKSGPQVKL	Homo sapiens
1176	3406	Type 5 Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5 Neuropeptide Y Receptor	Q15761	1076	PERPSQENHRSRLPEN	Homo sapiens
1178	3406	Type 5 Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENS DVHELRV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	P30989	936	CHPFAKAKTLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	P30989	937	GEQNRSADGGQHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	P30989	938	RQAAEQGGQVCTVGGHES	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	P30989	939	CPVWRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	941	PVAIMGSAQVEDEEIEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	P41146	943	CASALRRDVQVSDRVRSLAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2123	TPEPRPRTQPMASPRLGTFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2124	TAVASLLKGRGGIYE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKV/SQV/GGQTS	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHIPLKAGNDLDIRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKKSSRNIFSIVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRRLGETSASKNSSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSEDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGGLPRAKRK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGSPSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RVSGVVVPLKSLGRLKKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVRKNKITCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALVYKDLNLSPLRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRRLSRATRKASRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNNAEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKTLTKPVTLSRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIQNSIKMKNNWSVRRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAEFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRALTRTAVYTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMAVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLIATK	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLKRPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTEITLTKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANINTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	248	KAKVQCELNITAGLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	249	ESUMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTH2)	AAC50157.1	251	EETKEDSGRQGGDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	763	LYSGATLDEAERLIEEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTH1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDSDMGVWSRNC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRIFYAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDSDMGVWSR	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RITGDLNITKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFRKERIEGLRKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNI MGKGGEQMHEKSPYVSG	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSISVGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKKPFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMNERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRKNISKASRSSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTMIKMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHNNSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEDLPHTDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGRGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQVYVGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVYPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKSSKHALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVKTILKNLGC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDVYVSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNINHTLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SYVRVSVKLRNRVWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTGSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRKIA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCISSLAQRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRPVAVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVVRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVTIGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQE	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNIRTVQHGVTISL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFSSSESQSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSTETSDSHLTK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTFIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFKPGSRRUD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTLDDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNTC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVKVEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLPSLRKRSFRSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMAIASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMNIIVPTKVK	Homo sapiens



1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTITKDSIYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1152	ALLFSQDGGQREGQRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1153	SGDEEDAYSAPLPCLC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1154	ALLDTADLLAARERSC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1155	RRLRGSSSPGPQPRRGC	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KGSGRHILSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLHLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGGERPSSGDVVSIMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	EINMQSESNIIVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKITFEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGGGRRRWRLQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMTSSVAPASQSRIRLTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAQTAEERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLELELCPAGD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVYCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLITCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3 G Protein-Coupled	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGFSFIWQEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTRSSVRRVFHTLRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTFCFEKFPME	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGSVSTERQEAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLRLFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLEPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLPSETVSLITVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVVRICQVVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQGRRQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RLHAMRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRRLRLQLITC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHINATFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VLRSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDDNFRKNFRSILRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTSV	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNHSHKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQSKRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRVC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETHRDLARLG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostacyclin Receptor	P43119	1188	CRMVRQQKRHQGSLGPRPRT	Homo sapiens
1349	3921	Prostacyclin Receptor	P43119	1189	CFTQAVAPDSSEMIGD	Homo sapiens
1350	3921	Prostacyclin Receptor	P43119	1190	ASGRRDPRAPSAPVGKEGSC	Homo sapiens
1351	3921	Prostacyclin Receptor	P43119	1191	SAWGEQGVPLPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKNSAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLYAMHRRILQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASQPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEEAEDLRLR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDEVMTGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGDIVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPEGSPAISV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRIAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRFSISRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGQDSE	Homo sapiens
1373	3928	Receptor	Prostaglandin F2-alpha	P43088	1046	ILMKAYQRRFRQKSKAS	Homo sapiens
1374	3928	Receptor	Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor	Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor	Prostaglandin F2-alpha	P43088	1049	CFYNTEDIKDWDREFY	Homo sapiens
1377	3928	Receptor	Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHRQGRSHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLUGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTKKHSRKSSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNNLAKPTLPKTFR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLHVKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCVDVHNTCESSSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGTIPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	RSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQIRILANIR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTICCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNEFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYLSLHG	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDGC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSRREQTDLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPRFLRLMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MIRKLRTGETRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMIDNAEPEVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGSSKRKKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type 2	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type P30874	1001	KQDKSRLNETTETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type P32745	2622	REGGKGKEMINGRVSQI	Homo sapiens
1415	4482	3	Somatostatin Receptor Type P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	3	Somatostatin Receptor Type P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type P31391	1008	CLLEGAGGAEEEPDLY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type P31391	2627	KMRAVALRAGWQQRR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type P31391	2631	CRAVLSVDGLNMFTSV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type P31391	2633	CLVLGLVGNALVIFVL	Homo sapiens
1422	4484	5	Somatostatin Receptor Type NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type NP_001044.1	2638	CLRKGSGAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
1426	4552		Tachykinin Receptor 1 AAA36641.1	1339	CMIEWPEHPNKIYKVV	Homo sapiens
1427	4552		Tachykinin Receptor 1 AAA36641.1	1340	CPFISAGDVEGLEMKSTRYL	Homo sapiens
1428	4552		Tachykinin Receptor 1 AAA36641.1	1341	KVSRLETTITVVGAAHEE	Homo sapiens
1429	4552		Tachykinin Receptor 1 AAA36641.1	1342	EPEDGPKATPSSLDLTSNC	Homo sapiens
1430	4687		Thrombin Receptor P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
1431	4687		Thrombin Receptor P25116	2582	AVANRSKKSRAFLSAAVFC	Homo sapiens
1432	4687		Thrombin Receptor P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens

1433	4687	Thrombin Receptor	P25116	2621	DPRSFLRNPNNDKYEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDST	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRKLNCNCKQKPT	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVTD	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDDIFKI	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAIPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSVIYFELSQRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLLKTNISYGKNRTRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTITWLQGKRESMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDITRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRTIYVLARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAEALGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSGKAEQ	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEKFNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQIFYSNNRSPNTSTGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATIPWLGRDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens



1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLEADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGGGAHWNRPLVAVAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVGPSEK	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRTPTNAIIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSMTMIVA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNRDWSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRAMLAMFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDAK	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EEENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRVVDRQEEGNGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRPSPEEAVAQAEEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTTEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKKQIRAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSLK	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPIKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKIRAGQMSEPHSGLTLC	Homo sapiens

Protein	Accession	Gene	Species	Protein	Accession	Gene	Species
Inhibitor 3							
Brain-Specific Angiogenesis Inhibitor 3	5521	O60242	Homo sapiens	CTDNLRLRGADMIVHPQER	979		Homo sapiens
Brain-Specific Angiogenesis Inhibitor 3	5521	O60242	Homo sapiens	SRSETGSTISMSSLLER	980		Homo sapiens
SIV/HIV Receptor BONZO	6031	O00574	Homo sapiens	NDSSQEEHQDFLQFSK	1101		Homo sapiens
SIV/HIV Receptor BONZO	6031	O00574	Homo sapiens	KATKAYVQQAKRMTWG	1102		Homo sapiens
SIV/HIV Receptor BONZO	6031	O00574	Homo sapiens	KTLIHAGGFQKHSRK	1103		Homo sapiens
SIV/HIV Receptor BONZO	6031	O00574	Homo sapiens	SLKFRKNFWKLVDIGC	1104		Homo sapiens
SIV/HIV Receptor BONZO	6031	O00574	Homo sapiens	KSEDNSKTSASHNV	1105		Homo sapiens
Lysophosphatidic Acid Receptor Edg4	6204	AAC27728.1	Homo sapiens	ERHRSVMAVQLHSRLPRGR	66		Homo sapiens
Lysophosphatidic Acid Receptor Edg4	6204	AAC27728.1	Homo sapiens	RRRVQRMAEHVSCHPRYRE	67		Homo sapiens
Lysophosphatidic Acid Receptor Edg4	6204	AAC27728.1	Homo sapiens	NAAVWSCRDAEMRRTFRR	68		Homo sapiens
Lysophosphatidic Acid Receptor Edg4	6204	AAC27728.1	Homo sapiens	RQSTRESVHYTSSAQGGAST	69		Homo sapiens
C-C Chemokine Receptor 5	6213	AAC50598.1	Homo sapiens	YSQYQFWKNFQTLK	38		Homo sapiens
C-C Chemokine Receptor 5	6213	AAC50598.1	Homo sapiens	QGEAPERASSVYTRSTGEQE	39		Homo sapiens
C-C Chemokine Receptor 5	6213	AAC50598.1	Homo sapiens	RSQKEGLHYTCSSHFPYSQ	40		Homo sapiens
C-C Chemokine Receptor 5	6213	AAC50598.1	Homo sapiens	MIDYQVSSPIYDINVYTSEPC	309		Homo sapiens
Chemokine (C-C motif) Receptor-like 2 (CCR2)	6363	O00421	Homo sapiens	EDEYDVLIIEGELESDAEQC	1092		Homo sapiens
Chemokine (C-C motif) Receptor-like 2 (CCR2)	6363	O00421	Homo sapiens	KGNFFSARRRVPCGIITSVL	1093		Homo sapiens
Chemokine (C-C motif) Receptor-like 2 (CCR2)	6363	O00421	Homo sapiens	MIRKTLRFREQRYSFLKLVFA	1094		Homo sapiens
Chemokine (C-C motif) Receptor-like 2 (CCR2)	6363	O00421	Homo sapiens	RSNTPLQPRGQSAQGTSRE	1096		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	GPGNSARDVLRARAPREEQG	127		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	DPGGPRRGNSTNRRVRLKNP	129		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	LRQLSKEDLGFSGRAPAERC	130		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	PRGAVISGRSQEQSVKTVPG	131		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	CIGKSTVTSDDNDNEYTE	1781		Homo sapiens
Pael Receptor (GPR37)	6446	AAC51281.1	Homo sapiens	CIGKSTVTSDDNDNEYTE	1806		Homo sapiens
Putative Neurotransmitter Receptor (PNR)	6536	NP_005293.1	Homo sapiens	TDVVETRLSQWLEEMPC	319		Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLSQKVFPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKVIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWYNNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLTNPQMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAQQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFSLKRPQQGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLRSFGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSITRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNIPEDAKSTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFSIRKQIR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSTRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTTDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASRRQSSARTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEQSKSGSLLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLLHMEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLEQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGDLEQGLSEPEQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKSRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRITSTSRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTRKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSTNTVPDSAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSKRC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLVPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFAQE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLLPPLGNTPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELIQTVPKVGRVERKMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAGNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNKVDKKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDKVVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKIYIRLKRNNINMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHPLAMIFTLALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAGLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASNISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRYATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP1IY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP1IY20)	AAB97766.1	1083	LYRPPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP1IY20)	AAB97766.1	1085	PRELAAGQSFHGCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNP1IY20)	AAB97766.1	1086	CKTVRLSDVRVPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PFLLDAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLYVVGRRKKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNQIRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPRNEPANNGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRLRSRTLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSVDCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMNRSQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQTSSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDFLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSGGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGEPTNE	Homo sapiens

1581	16599	Smoothered	NP_005622.1	2670	EAEISPELQKRLGRKK	Homo sapiens
1582	16599	Smoothered	NP_005622.1	2671	ANVTIGLPTKQPIPD	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAVW	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVVRVHNQSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRRIRQPSTVVC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYDYDLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPYHRLRTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTLEPWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEVVCRGEREVVGPKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRLDSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIVVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAASYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210	NP_057456.1	1524	QGTLEILYPD AHLSAED	Homo sapiens
1605	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	G Protein-Coupled Receptor LOC51210	ENSP00000164265	2030	SVVQLRRQRDPFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	G Protein-Coupled Receptor Ls19072	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	Receptor Ls19072	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	Receptor KIAA0758	Q9UIZ3	1518	RLANNITGGWDSSGCWEEGD	Homo sapiens
1613	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1519	CKQEKSLFQISKSIG	Homo sapiens
1614	21632	Receptor KIAA0758	BAA96055.1	2164	CTAFQRRREGGVPGRPGSPG	Homo sapiens
1615	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	Receptor Ls21632	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	Receptor GPR92/GPR93	LR29	426	TLARPDATQSQRRRKTVRL	Homo sapiens
1621	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	427	RSKLVAASVPARDRVRG	Homo sapiens
1622	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	428	AQSERSAVTTDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGSR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTETPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYIKNRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLFRFRQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEILTEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRAAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHKIRDAUR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSQDVVIMRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNRSDGPGKNTLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRRKRKHNSQIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRLFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLGSVRRSEVRIYVD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLTEEEGGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRTRGRKNSSTSTSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYWREPFVQRQRISR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFCSCQDSGNL	Homo sapiens



1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIVEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEFLDFEED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINQLUSETAEVVTN	Homo sapiens
1652	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTLLEQMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNQSI SLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytopic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRYSYSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKPQATVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIQGPGSKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKTQLTSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRIKKKKQLGAQRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DTGKQHMFMNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVVNVSLSLNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNING	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLITPRIR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEASRVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLLELSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTPGSGSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFIUG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAAQAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIESDTESFNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQNRFRQFTQNGKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEVYRLFKNVP	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLKIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLNVNHRRTLTLMHTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLGYNKNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSYELQQQSMKRSNRRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSEQMDQDHSSDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Muscarinic acetylcholine Receptor M3	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARVGR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGQGRNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEPDASLMPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSFR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPGS	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLRPSSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTKNSVSPSE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVYHGGEAAQQRPRDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRTE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSRPRRVSLC	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPLSLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILRTLFRSRKRHRITVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTILRTQILRSCEAKQQL	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPHSPGAFAYE	Homo sapiens
1718	130108	Receptor 1 (CCXCR1)	NP_006785.1	1589	RIEYVYVSNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQLTRKNAQVRKC	Homo sapiens
1720	130108	Receptor GPR75	NP_006785.1	1591	RNQNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVN	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKKFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMDPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRAVPGHQAHGANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLEIPTSLSLRVNR	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AAB05897.1	1290	CVVAWPEDSGGKTL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKYIVTRNPQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPKKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_0006639.1	1896	SRSRFIRNTNESGEEVT	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_0006639.1	1898	CQKEDSVYVCGPYFPRGWNIN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_0006639.1	1899	SGEEVTFFDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNFITGMPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSLPFFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYSSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EETINISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPFVYITHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHRNDCRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMGPRRQKDNC	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRPL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTTEQVRSNGEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTINEDRGVGGEGMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPSPGSGSNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal Polypeptide Receptor 2	P41587	1306	CGSSFSRNGSEGALQFHR	Homo sapiens
1761	160055	Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPPSGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGHRQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRD TAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGIKTVC	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPFLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTIRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVNGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRLVAADV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAEHLRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCGCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLTACRLRQPGQPKSRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSCSTQ	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAAAAPHPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNITVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNNGCTHCYLAFNDS	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGVWHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMILKENYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEEFLLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSIA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEEHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMRQTVTWVTLHLSLSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYNNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFPVTSIAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEEPRGPARLLGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPTQTGPLNIRALSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYSW/DVCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKYMCFHNMISDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQOK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSISFFLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMNIRAHPRSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR55 G Protein-Coupled	AAC52028.1	2	AQRPTDVGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYTSKLSDANC	Homo sapiens
1815	160221	Receptor GPR35 G Protein-Coupled	LR6	335	FPPVLDGGGGDEDAAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGSGGEEAAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPAVMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARRLLVLE	Homo sapiens



1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPKPQEDGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADEQSAAALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAEQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETGEQQRSKRGTEDDEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPKDGGTPDSGGQLR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Spingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLFRMRE	Homo sapiens
1833	160225	Spingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Spingolipid Receptor Edg6	CAA04118.1	72	RLVQASGQKAPRPAAR	Homo sapiens
1835	160225	Spingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPRD	Homo sapiens
1836	160225	Spingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGQKAPRPAAR	Homo sapiens
1837	160225	Spingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPRDSFRGSRSLFRM	Homo sapiens
1838	160225	Spingolipid Receptor Edg6	CAA04118.1	1916	RSLSFRMREPLSSISVR	Homo sapiens
1839	160225	Spingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVYQAVRHINKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQRRQRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNTFLCYDKYPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSKDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVILKYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSDESLSVDDSDKTIG	Homo sapiens
1850	160312	Spingolipid Receptor Edg5	O95136	1018	ERHVAIAKVLYGSDKSC	Homo sapiens
1851	160312	Spingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRLPQC	Homo sapiens
1852	160312	Spingolipid Receptor Edg5	O95136	1020	QEHVNTKETLETQET	Homo sapiens
1853	160312	Spingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1922	MMRKKAKFSURENPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1924	CEQTEEEKKILKRHLAIFRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMIPRT221753	1925	KKRVGDGSLVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARPERFIMNEKAWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVWSRKKQKIHK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPPQQLVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRLGLSRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKSCKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNINIKTDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKRTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13	O76067	1308	CANDSDTLELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PIRARALRGRRRLALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQIFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFGQRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1213	CELRDLQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSEEDR	Homo sapiens
1873	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEGSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2	O95838	1312	GSLLFETTRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2	O95838	1313	QTIENTADIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2	O95838	1315	CPKKLSEGDGAELRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHESEHQSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSGRGRSGGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELIGHLVPHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSQKSPSYIPFLREES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLGELKPSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKVKSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CGEQKMLRTLDSYNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTADAANVTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLSENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDTLDTRESLSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMIPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963) Platelet Activating Receptor Homolog (H963)	O14626	1226	ETFASPKETKAQKEKLR	Homo sapiens
1910	161024	Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024	Protein A	NP_062832.1	1691	EDARGKRRSSLDGSESAC	Homo sapiens
1912	161024	Protein A	NP_062832.1	1692	RTVWEQCVAIMSEEDGD	Homo sapiens
1913	161024	Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024	Protein A	NP_062832.1	1694	RRLSHDETINFSTPRE	Homo sapiens
1915	161024	Protein A	NP_062832.1	1695	GGPEYLGQRHRLDEED	Homo sapiens
1916	161024	Protein A	NP_062832.1	1696	REEITFIDETLPSP	Homo sapiens
1917	161024	Protein A	NP_062832.1	1697	RRPRPLGLSPRRLSLGSPE	Homo sapiens
1918	161214	Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214	Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214	Galanin Receptor GalR3	AAC35944.1	204	ASRHFRARFRRLWPC	Homo sapiens
1921	161214	Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221	Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRLPLDTVQRPKG	Homo sapiens
1923	161221	Urotensin-II Receptor (GPR14)	LR15	372	RAYRRSQRAFKRARRPGAR	Homo sapiens
1924	161221	Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHLRGRVRGPGSG	Homo sapiens
1925	161221	Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249	G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPELNLTLDEALRLK	Homo sapiens
1927	161249	G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERILLMQEAKGRG	Homo sapiens
1928	161249	G Protein-Coupled Receptor GPR66	LR20	396	RGSAARSRVTCRLQQH	Homo sapiens
1929	161249	G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251	Purinergic Receptor P2Y10	O00398	859	CFLLKPFARADWKRRYD	Homo sapiens
1931	161251	Purinergic Receptor P2Y10	O00398	860	PFPLRSTDLNNIKSC	Homo sapiens
1932	161251	Purinergic Receptor P2Y10	O00398	862	QLSRHGSSVTRSLMSKE	Homo sapiens
1933	161251	Purinergic Receptor P2Y10	O00398	863	LRQPPMAFQGISERQK	Homo sapiens
1934	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	WYDDLDDVDYEEAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYYPEMSTNWWIRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRLLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEGKEGPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLTSAPTASPSAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTPSPRRGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGTTDVDGNSVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTTTASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSPFLMAKPGKDEKNNTKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSSHKKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLHNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHLSSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTTRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRIRLRIDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPSRLKRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTILFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRAGP WALLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPHISGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERPSRIPST	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGTMKKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPRRFAAFTAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHLNSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQRNIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPFRAKLQSTRRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKQNLRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LVMSEEFREGKGVWK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPEPASIEPK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSESLSSRSTMVTS	Homo sapiens

1778	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQITPHRTFGGK	Homo sapiens
1779	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEELRLPSREGSIEE	Homo sapiens
1780	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1781	189900	Receptor GPR61	LR1	312	TGKLPGARYQPGAGLRAD	Homo sapiens
1782	189900	Sphingolipid Receptor Edg8	LR1	316	ALERSLTMARPGPAPVSS	Homo sapiens
1783	189900	Sphingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1784	189900	Sphingolipid Receptor Edg8	LR1	318	CGRDPGSGQSAASAAEASG	Homo sapiens
1785	189901	Sphingolipid Receptor Edg8	LR1	2266	ASRKAEEAIGKLVQGEVS	Homo sapiens
1786	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1787	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	ENSP000000071589	2271	RVDYLLHETWRFGAAAC	Homo sapiens
1788	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	ENSP000000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1789	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1790	189901	G Protein-Coupled Receptor Ls189901 (HEOAD54)	ENSP000000071589	2274	RGRQGPVDESSVQPSR	Homo sapiens
1791	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIUKYPFREHLLQKKE	Homo sapiens
1792	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGTTCNDFASSGDPN	Homo sapiens
1793	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1794	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSKWKQYQC	Homo sapiens
1795	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNQLRHNFKS	Homo sapiens



1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFLAVGNPDLIQPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NLRLHNLRIHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPQMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSFKFLQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHTRIQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1716	KNKSFEGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1717	RNNNEVWGKESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1718	CGRNGKRSNRTLREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1719	TSKSKSSSTTVFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor DJ287g14.2	Q9Y3K0	1720	DKSLSKLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLLRSTDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVTLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTILFDGERERK	Homo sapiens
2013	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1729	EGKEGDYRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNLRNQNNQVKKDKKAAK	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSTPWVLFDAIT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR58	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGAVKK	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMRLTISI	Homo sapiens
2022	190188	G Protein-Coupled Receptor GPR57	LR36	439	ENHDQDLDELQLEMEDSKP	Homo sapiens
2023	190188	Receptor LGR6	LR36	440	NPHFRDDLRLRPRAAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDEESKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	Receptor LGR6	CAC33098.1	1836	CAARRQHALLYNVVRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHKTIKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHPDLPGTGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDAQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSVNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTSPYYWWPNIWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYSLLSFISPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFFLWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTLTP	Homo sapiens
2043	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	471	ASSIMLLDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHPPQAKATKC	Homo sapiens
2046	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPIVYLIF	Homo sapiens
2048	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIWFLQPYK	Homo sapiens
2049	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLLHVTISRSAWILC	Homo sapiens

2051	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2260	VSHRKALTIITLIIFLC	Homo sapiens
2054	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2261	CFLPYHTLRTVHLTTWKVGL	Homo sapiens
2055	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2262	CKDRUHKALVITLALA	Homo sapiens
2056	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2263	YFAGENFKDRLKSALRKG	Homo sapiens
2057	190427	Receptor Cysteinyl Leukotriene Receptor	CYSLT2 NP_065110.1	2264	HPQKAKTKCVFPVSVWLKE	Homo sapiens
2058	190437	G Protein-Coupled Receptor C5L2	LR31	429	DSVSYEYGDYSDLSDRPVDC	Homo sapiens
2059	190437	G Protein-Coupled Receptor C5L2	LR31	430	RESQGGQDESVDKSTSHD	Homo sapiens
2060	190437	G Protein-Coupled Receptor C5L2	LR31	431	PSAIVRRUHQEHFARLQC	Homo sapiens
2061	190437	G Protein-Coupled Receptor C5L2	LR31	432	CHWALRESQGQDESVDKKS	Homo sapiens
2062	190437	G Protein-Coupled Receptor C5L2	NP_060955.1	2818	MGNDSVSYEYGDYSDLSDRPVDC	Homo sapiens
2063	190438	G Protein-Coupled Receptor Ls190438	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	G Protein-Coupled Receptor Ls190484	LR33	434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	G Protein-Coupled Receptor Ls190484	LR33	435	RTCHRQQQPAACRGFARVAR	Homo sapiens
2066	190484	G Protein-Coupled Receptor Ls190484	LR33	436	EERPGSFPTPEQTQLDSEG	Homo sapiens
2067	190484	G Protein-Coupled Receptor Ls190484	LR33	437	RSDPTAQPLNPTAQPSQSD	Homo sapiens
2068	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1730	RNVTDIDILALERLLQ	Homo sapiens
2069	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1731	KKKRMAMARRTMFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTTSASGSENLTIIQQE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALIELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDVPVTRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGSLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPAIYQSLKAQNAYSRHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSHSSVTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKLLNLTILGMRRKNKTCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTLVQAIRITSYME	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQIRQLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPVPSYRSTHRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSVAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRP AERKTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDSYFSFGNHWVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIVAYYKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMIDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSVVEEFPDSEGTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSFIREDDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAASQIN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLVLDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTLLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGWARRQAPAGDRLC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLHRRSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLIRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMMAATHAVYVKLLFEYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTFRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	568	KDCIESTGDYFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGSR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLQEKQKNHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RGSGEGGPQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKRRSLGTTQVFFLLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQRKSMDSKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMRKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPLFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSQQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTPSDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTSSSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLFLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLNPLIYAYWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSLRSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPLRPRLPGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDNTNINLSLSTRVTLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHITLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TQHTGVLIKVTLMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMLVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYFNMINIYWSLWKRDHLSRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRSSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVALHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTVPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDTATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	481	TEVPDSAQTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	522	GDTAVERLNVFITMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	523	MSLAKRVMITGLWIFI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPRL2)	LR14	525	LHFIIGFTVPMISITV	Homo sapiens



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2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLPTLRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHILDGLEDVLRGLSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVVGVLSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHLSST	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHQGLLQDGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSGKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRLLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGEASSTRRGGS	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYUAKEQARUSDANGK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEIYYKHVHC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNNWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRVVS	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSVYRTRGVGVKVP	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLSQDNRRKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMNF	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSITNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TFUTSTNRTNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLTHGLQTDSCCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSISCSIENQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQGPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFFTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLULWVKDSV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNITIEVRINRTLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIGSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1666	RDVESKVLETALKDPEQK	Homo sapiens
2203	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1667	KIQNDSVAIETQAITDNC	Homo sapiens
2204	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1668	CSEERKTFNLNVQMNMSMIDIR	Homo sapiens
2205	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1669	EEMDKKDQVYVNSQVVSAA	Homo sapiens
2206	193511	Mucin-Like Receptor EMR3 EGF-Like Module-Containing	AAK15076.1	1670	SKSVTLTFQHVVKMTPSTK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3 G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2142	CLLLPTAVIVFSVVKIIAK	Homo sapiens
2208	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2144	RPDSIPIQLSVVPTLLA	Homo sapiens
2209	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2145	CQTGGILKATKKKSLEG	Homo sapiens
2210	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2146	RLHTVTVTRKSSAVLE	Homo sapiens
2211	193516	G Protein-Coupled Receptor dJ402H5.1	CAC21687.1	2620	PTAVIVFSVVKIIAKV	Homo sapiens
2212	193524	Receptor dJ402H5.1 Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERRRLGLDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRQSARNSRGPPEQPNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQPNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVVLRL	Homo sapiens
2217	193524	Cadherin EGF LAG Seven- Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens